

Natural Gas Monthly

February 2000

Energy Information Administration
Office of Oil and Gas
U.S. Department of Energy
Washington, DC 20585

This report is available on the WEB at:

[Http://www.eia.doe.gov/oil_gas/natural gas /data_publications/natural_gas_monthly/ngm.html](http://www.eia.doe.gov/oil_gas/natural_gas/data_publications/natural_gas_monthly/ngm.html)

This report was prepared by the Energy Information Administration, the independent statistical and analytical agency within the Department of Energy. The information contained herein should be attributed to the Energy Information Administration and should not be construed as advocating or reflecting any policy position of the Department of Energy or any other organization.

Natural Gas Publications and Databases Available Electronically

All of the natural gas publications are available electronically on the EIA website. Certain natural gas data are also provided in database formats on the web site. The table below is a guide to the major natural gas products.

Product	Format	Contents
Publications		
<i>Natural Gas Weekly Market Update</i>	PDF	Analysis of current price, supply and storage data
<i>Natural Gas Monthly</i>	PDF	Monthly supply, disposition, and price data
<i>Natural Gas Annual</i>	PDF	Annual supply, disposition, and price data
<i>Historical Natural Gas Annual</i>	PDF	Historical annual supply, disposition, and price data from 1930 - 1997
<i>Issues and Trends</i>	PDF	Comprehensive analysis of growth and change in the natural gas industry
<i>U.S. Crude Oil, Natural Gas and Natural Gas Liquids Reserves</i>	PDF	Proved reserves in the United States
<i>Oil and Gas Field Code Master List</i>	PDF	Listing of U.S. oil and gas field names
<u>Databases</u>		
Monthly Data	TXT	Tables 1-6, and 9 from the <i>Natural Gas Monthly</i>
Historical Monthly Data	EXE	Consumption and price data, 1984-1994; 1995-present
Annual Data	TXT	Tables from the <i>Natural Gas Annual</i>
Historical Annual Data	TXT	Tables from the <i>Historical Natural Gas Annual</i>
Field Codes	EXE	Oil & Gas Field Code Master List
<u>Applications</u>		
EIA-176 Query System	EXE	Company filings to the Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition"
EIAGIS	EXE	Periodic updates for users of the EIAGIS-NG Geographic Information System

PDF files are image files that can be viewed through Adobe Acrobat.

TXT files are ASCII text. They may be replications of published tables, including table titles, column and row identification, or they may be flat files with a minimum of content description suitable for input to spreadsheets or other programs.

EXE files are executables that can be downloaded then opened. Databases are distributed as self-executing Zipped archives which spawn numerous data files and documentation. Applications are distributed as self-executing Zipped archives which initially generate numerous files and then form an application which is installed on the user's PC.

Preface

The *Natural Gas Monthly* (NGM) is prepared in the Natural Gas Division, Office of Oil and Gas, Energy Information Administration (EIA), U.S. Department of Energy (DOE), under the direction of Joan E. Heinkel.

General questions and comments regarding the NGM may be referred to Ann M. Ducca (202) 586-6137. Specific technical questions may be referred to the appropriate persons listed in Appendix E.

The NGM highlights activities, events, and analyses of interest to public and private sector organizations associated with the natural gas industry. Volume and price data are presented each month for natural gas production, distribution, consumption, and interstate pipeline activities. Producer-related activities and underground storage data are also reported. From time to time, the NGM features articles designed to assist readers in using and interpreting natural gas information.

The data in this publication are collected on surveys conducted by the EIA to fulfill its responsibilities for gathering and reporting energy data. Some of the data are collected under the authority of the Federal Energy Regulatory Commission (FERC), an independent commission within the DOE, which has jurisdiction primarily in the regulation of electric utilities and the interstate natural gas industry. Geographic coverage is the 50 States and the District of Columbia.

Explanatory Notes supplement the information found in tables of the report. A description of the data collection surveys that support the NGM is provided in the Data Sources section. A glossary of the terms used in this report is also provided to assist readers in understanding the data presented in this publication.

All natural gas volumes are reported at a pressure base of 14.73 pounds per square inch absolute (psia) and at 60 degrees Fahrenheit. Cubic feet are converted to cubic meters by applying a factor of 0.02831685.

Common Abbreviations Used in the Natural Gas Monthly

AGA	American Gas Association	IOGCC	Interstate Oil and Gas Compact Commission
Bbl	Barrels	LNG	Liquefied Natural Gas
BLS	Bureau of Labor Statistics, U.S. Department of Labor	Mcf	Thousand Cubic Feet
Bcf	Billion Cubic Feet	MMBtu	Million British Thermal Units
BOM	Bureau of Mines, U.S. Department of the Interior	MMcf	Million Cubic Feet
Btu	British Thermal Unit	MMS	United States Minerals Management Service, U.S. Department of the Interior
DOE	U.S. Department of Energy	NGL	Natural Gas Liquids
DOI	U.S. Department of the Interior	OCS	Outer Continental Shelf
EIA	Energy Information Administration, U.S. Department of Energy	STIFS	Short-Term Integrated Forecasting System
FERC	Federal Energy Regulatory Commission	STEO	Short Term Energy Outlook
		Tcf	Trillion Cubic Feet

Contents

Special Report: “Next Generation * Natural Gas (NG)² Information Requirements-- Executive Summary”	vii
Special Report: “Increasing Importance of Natural Gas Imports on the U.S. Marketplace”	xi
Highlights	1
Appendices	
A. Explanatory Notes	75
B. Data Sources	83
C. Statistical Considerations	89
D. Natural Gas Reports and Feature Articles	95
E. Technical Contacts	99
Glossary	101
Tables	
1. Summary of Natural Gas Production in the United States, 1994-2000.	7
2. Supply and Disposition of Dry Natural Gas in the United States, 1994-2000.	8
3. Natural Gas Consumption in the United States, 1994-2000.	10
4. Selected National Average Natural Gas Prices, 1993-1999	12
5. U.S. Natural Gas Imports, by Country, 1993-1999	14
6. U.S. Natural Gas Exports, by Country, 1993-1999	16
7. Marketed Production of Natural Gas, by State, 1993-1999	17
8. Gross Withdrawals and Marketed Production of Natural Gas by State, October 1999	20
9. Underground Natural Gas Storage - All Operators, 1994-2000	21
10. Underground Natural Gas Storage - by Season, 1998-2000	23
11. Underground Natural Gas Storage - Salt Cavern Storage Fields, 1994-1999	24
12. Underground Natural Gas Storage - Storage Fields Other than Salt Caverns, 1994-1999	25
13. Net Withdrawals from Underground Storage, by State, 1997-1999	26
14. Activities of Underground Natural Gas Storage Operators, by State, December 1999	30
15. Natural Gas Deliveries to Residential Consumers, by State, 1997-1999	31

16. Natural Gas Deliveries to Commercial Consumers, by State, 1997-1999	35
17. Natural Gas Deliveries to Industrial Consumers, by State, 1997-1999.....	39
18. Natural Gas Deliveries to Electric Utility Consumers, by State, 1997-1999.....	43
19. Natural Gas Deliveries to All Consumers, by State, 1997-1999.....	47
20. Average City Gate Price, by State, 1997-1999.....	51
21. Average Price of Natural Gas Delivered to Residential Consumers, by State, 1997-1999.....	54
22. Average Price of Natural Gas Sold to Commercial Consumers, by State, 1997-1999	57
23. Average Price of Natural Gas Sold to Industrial Consumers, by State, 1997-1999	60
24. Average Price of Natural Gas Delivered to Electric Utility Consumers, by State, 1997-1999.....	63
25. Percentage of Total Deliveries Represented by Onsystem Sales, by State, 1997-1999.....	66
26. Gas Home Customer-Weighted Heating Degree Days	73
A1. Methodology for Reporting Initial Monthly Natural Gas Supply and Disposition Data.....	75
C1. Standard Error for Natural Gas Deliveries and Price to Consumers by State, November 1999.....	94

Figures

1. Production and Consumption of Natural Gas in the United States, 1997-2000	9
2. Natural Gas Deliveries to Consumers in the United States, 1995-1999	11
3. Average Price of Natural Gas Delivered to Consumers in the United States, 1996-2000	13
4. Average Price of Natural Gas in the United States, 1995-1999	13
5. Working Gas in Underground Natural Gas Storage in the United States, 1997-2000	22
6. Percentage of Total Deliveries Represented by Onsystem Sales, 1996-1999	72

Next Generation * Natural Gas (NG)²

Information Requirements Executive Summary

The Energy Information Administration (EIA) has initiated the **Next Generation * Natural Gas (NG)²** project to design and implement a new and comprehensive information program for natural gas to meet customer requirements in the post-2000 time frame. This effort is in response to regulatory changes and the evolving structure and operations of the industry that have impacted the needs of EIA's customers for its data and other information products. EIA has undertaken this effort so that its natural gas data and analysis programs will reflect the information appropriate to a restructured industry. The (NG)² project uses input from public policy makers and other natural gas information users to identify and define the information needed for policy making, and to assess the gas industry's performance. This assessment includes addressing supply, demand and price developments within the industry; the competitiveness of the industry; and determinants of long-term demand.

EIA has developed an Information Requirements report which presents a draft set of data requirements that have been identified for the new information program. This Executive Summary gives an overview of the report. The full report contains four sections that:

- discuss the economic issues and public policy questions that the natural gas information program intends to address.
- present a brief background description of EIA's current data collection program.
- describe how these requirements can be used to assess the performance of the industry and what issues are associated with the requirements.
- present a table detailing the proposed data requirements.

Information users and providers are invited to comment on the proposed data requirements. EIA plans to consider these comments during the process of validating and refining a final set of data requirements.

After the final data requirements are established, EIA plans on implementing new and revised data collection and information programs. The plan for the implementation process includes innovative design and collection techniques and thorough testing of proposed collections. Collection of information by survey forms is only one option that will be investigated to address any new data requirements. In every stage of the (NG)² project, EIA plans to seek cooperation and feedback from natural gas information stakeholders. The (NG)² project is a long-term effort that has an ultimate completion date of January 1, 2003, with portions of the project becoming operational as soon as January 2001.

Public Policy and Economic Issues

The public's need for information about the natural gas industry has changed with restructuring. Public policy now relies on competition to ensure adequate supplies, low costs, and reasonable prices to consumers. Competition in exploration, development, and production appears to be vigorous. Storage facilities are multiplying and marketers are selling increasing volumes of gas. Residential and other small volume customers traditionally purchased gas solely from local distribution companies, but increasingly, these customers find they have a choice of suppliers. At present, many still depend upon their local distribution companies to purchase their supplies, but the number of alternate arrangements is growing. Where customer choice prevails, the gas commodity is delivered by the still regulated pipelines and local distributors. Both the transition to a competitive market with continued deliveries by monopoly common carriers, and the

perpetuation of utility companies as regulated merchants raise issues of public policy. Consequently there is a need to confirm that market mechanisms are working as intended. Public policy makers are also looking to natural gas to supply new competitive electricity generators and, longer term, to displace more carbon intensive fuels. Data are needed to make realistic assessments of the ability of the gas industry to support these policy objectives.

Regulatory reform has greatly complicated the task of collecting price data about the industry. Before regulatory reform, companies reported extensive financial information to regulators who verified that the costs and profits satisfied regulatory guidelines. Because pipelines and local distribution companies owned the gas in their custody, they knew the purchase and sales prices. In that environment EIA only had to survey a relatively small number of firms to obtain a complete picture of physical flows, financial returns, and prices in the industry. Today, pipelines and increasing numbers of distribution companies are becoming open-access transporters of natural gas. Because gas shipped along an open-access transporter generally is priced in unreported private deals, the transporter is not expected to reliably know the prices of the gas transported for others. In addition, entities which did not exist a decade ago (i.e., marketers, independent storage facilities, spot markets, and futures markets) are now central to the industry operation. The data collected under EIA's traditional approach have come to describe only a portion of the industry, and they fragment price, quantity, and financial data.

Summary of Objectives

The *Next Generation * Natural Gas* project is a multi-year effort intended to produce a revised information system reflecting the new realities that have resulted from regulatory reform and the new competitive structure of the industry. Collection of the targeted information is expected to rely on a combination of survey forms and secondary sources. Achieving a successful new program will support EIA's goal to serve policymakers and private decisionmakers with high quality, timely, and comprehensive energy information.

A number of features of the data redesign effort have been identified, including:

- EIA has long maintained quality coverage of volumes of gas delivered to consumers. It is expected

that this quality and coverage can be maintained under the new information program.

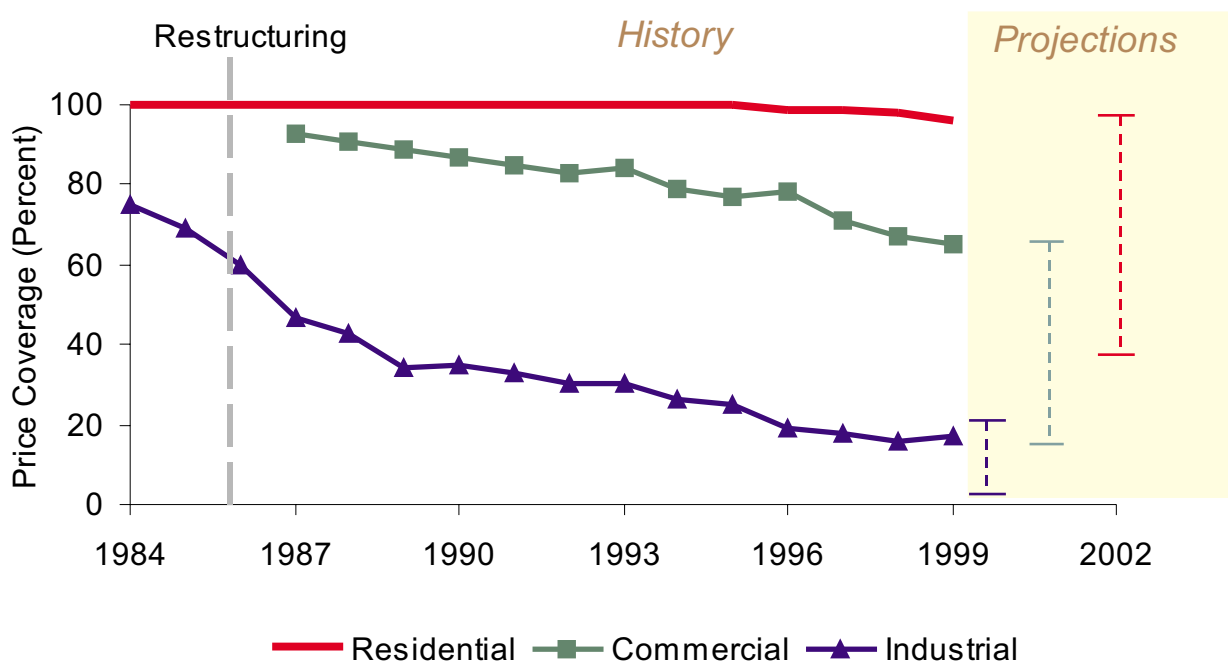
- The usefulness of consumer sector definitions must be reconsidered. Would categorizations such as large- versus small-volume commercial consumer, or residential versus nonresidential consumer be more useful than the present classification scheme that aggregates commercial and residential customers?
- EIA's coverage of prices has declined as the industry has restructured. It is expected that EIA can improve its coverage of prices with the new information program.
- Because consumer price information can no longer be gathered from a single source (primarily the local distribution companies), the price may be developed from several components and sources. This will pose a challenge to maintain coverage and quality of data.
- The ability to understand the impact of new market institutions, such as unbundled local distribution companies, and their role in the efficient functioning of the marketplace is important and needs to be addressed in a comprehensive information program.

Current Data Collection Program

Most elements of EIA's current natural gas data collection program have been in place for more than 20 years. During this period as the industry has restructured, coverage of certain of its aspects has declined. It is expected that the current data collection program will be revised and expanded to address this coverage decline and to address new information requirements.

The most notable change in coverage has occurred as the physical and financial flows of gas in the market place have diverged. EIA's current data collections effectively track the volumes of gas flowing from processing plants and border points of entry through pipelines to storage and end-use customers. However, the coverage of prices has declined as marketers and other new players have entered the industry. The respondents that provide volume data to EIA often no longer know the associated prices. Price coverage has declined sharply in the industrial sector (by 80 percent) and significantly in the commercial sector (by 20 percent) (Figure SR1). Coverage of residential

Figure SR1. Price Coverage by Sector Has Declined in Recent Years



Source: EIA, Office of Oil and Gas, Natural Gas Division.

prices could also decline soon as customer choice programs for purchasing natural gas are implemented in several States. For example, the State of Georgia has mandated retail supplier choice for many of the State's natural gas residential and commercial users. These developments are expected to impact EIA's coverage of these prices in Georgia.

Data Requirements

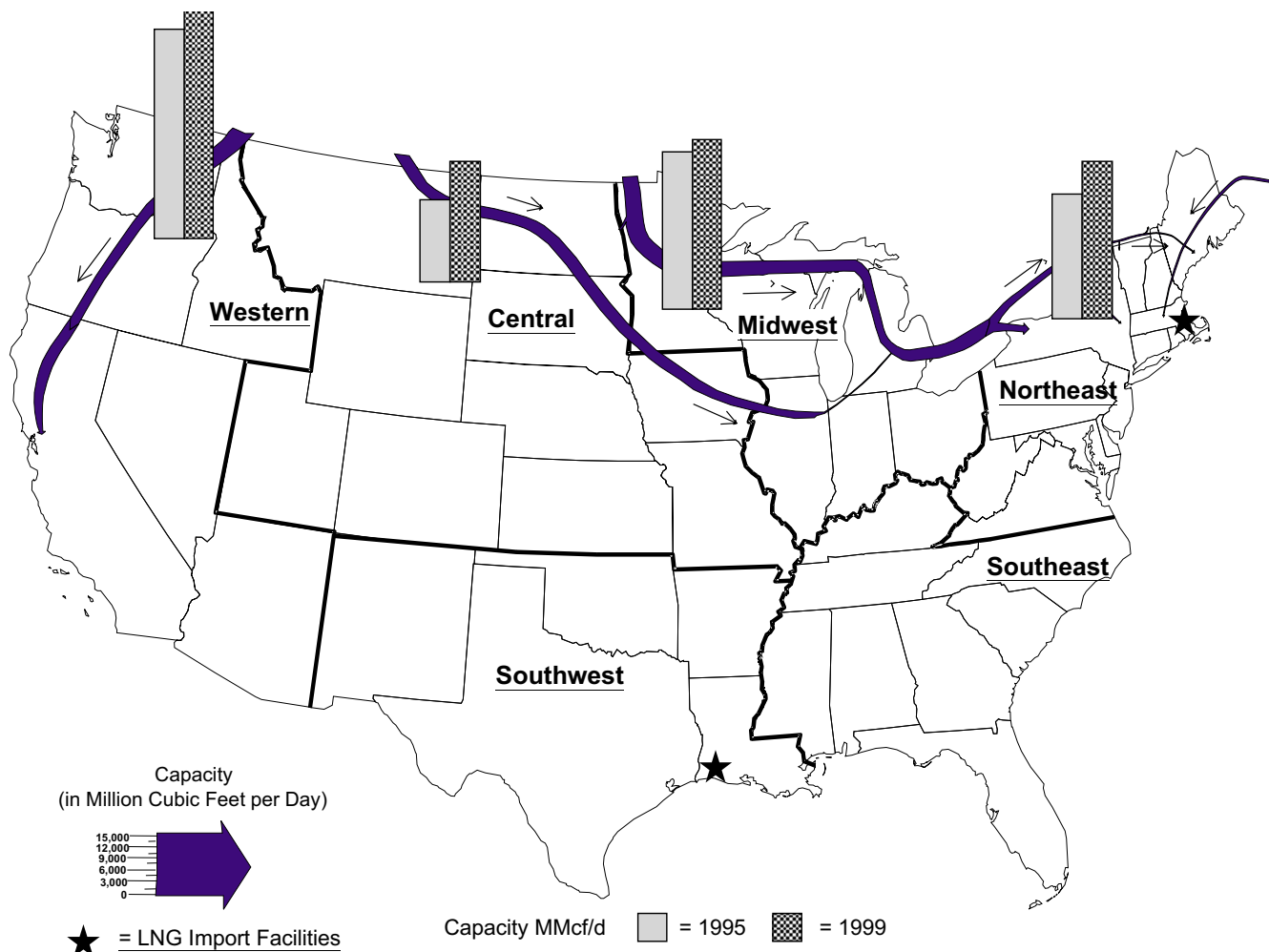
The data requirements were developed from the results of a series of focus groups that were conducted by EIA with representatives of various groups including the gas industry, state governments, economists, Federal officials, and others; the results of executive interviews conducted by EIA with industry representatives and Congressional staff; and meetings with EIA industry experts. The data requirements were developed with careful consideration of the public policy and economic issues described above.

The data requirements are grouped into seven categories: domestic supplies, foreign trade, storage, consumption, transportation, distribution, and markets. The full Information Requirements report describes how the requirements for these categories can be used to assess the performance of the industry and what issues are associated with the requirements. While the need for financial characteristics of companies and environmental data have been raised in discussions with users, the current effort is focusing more directly on market issues.

Information User and Provider Comments

The full Information Requirements report is on the EIA website at http://www.eia.doe.gov/oil_gas/natural_gas/ng2/ng2main.html. Information users and providers are invited to comment on the proposed data requirements. Your comments may be directed to: Ann Ducca, ann.ducca@eia.doe.gov, (202) 586-6137 or William Trapman, william.trapmann@eia.doe.gov, (202) 586-6408.

Increasing Importance of Natural Gas Imports on the U.S. Marketplace



Source: Energy Information Administration, Office of Oil and Gas.

The growing importance of imported natural gas supplies in the U.S. marketplace, especially the Northeast, is reflected in the two-fold increase in Canadian and overall net imports since 1990. Net imports increased significantly to 3,397 billion cubic feet (Bcf) in 1999 because of various factors, including Canadian-U.S. border pipeline expansions and an increase in liquefied natural gas (LNG) imports. The Northeast has become a significant receiving region for natural gas during the past decade. In 1998, the total volume of gas delivered to the consuming Northeast was 2,877 Bcf, which included 728 Bcf or 25 percent from imports.

A key event in the development of imports from Canada occurred in 1999 with the completion of the Maritimes and Northeast Pipeline, which establishes a

link between the Sable Offshore Energy Project (SOEP) and New England markets. The SOEP, located off Nova Scotia in the northern Atlantic, is seen as a development with potentially far-reaching consequences as it marks the first commercial natural gas project in the Atlantic. The Sable Island project contains about 3 trillion cubic feet of recoverable gas resources and is designed to supply about 530 MMcf/d to the 650-mile Maritimes and Northeast Pipeline, which will deliver 400 MMcf/d to the New England marketplace. Only 36 MMcf/d was making its way into U.S. markets from the Maritimes and Northeast Pipeline before a second shutdown arose because of a possible gas leak at the Sable processing plant onshore. However, the Sable Island project is expected to send 360

MMcf/d to the U.S. markets soon after reopening and reach its peak flow of 530 MMcf/d by November 2000. Over 50 percent of gas deliveries from the Maritimes and Northeast Pipeline will be to Maine, which currently has very limited access to natural gas, ranking forty-ninth in the United States for natural gas consumption. With the Maritimes and Northeast Pipeline, Canadian flow capacity to the Northeast is 3,027 MMcf/d in 1999, up 26 percent, from 2,393 MMcf/d in 1997.

LNG imports from various countries still represent only a small portion, around five percent, of overall U.S. imports although they are a significant supply source for several regional markets. Total LNG imports for 1999 increased 89 percent to 161 Bcf from the 1998 level of 85 Bcf. Eighty percent of LNG imports in 1998 were supplied by Algeria, while 20 percent were from Australia and the United Arab Emirates (UAE). Forty-six percent of the LNG imports in 1999 were supplied by Algeria, while the remaining 54 percent came from Trinidad, Qatar, Australia and Malaysia. This rapid growth in LNG imports is partly due to the startup of the Atlantic LNG project in Trinidad. This project has contributed 31 percent of U.S. LNG imports for 1999 even though LNG receipts only began in May 1999. LNG imports during the third quarter of 1999, were up 211 percent from the third quarter of 1998, due in part to the Atlantic LNG project. Another factor contributing to the growing LNG supplies to

the United States is the increase of short-term sellers of LNG. Spot purchases of LNG accounted for 5.1 Bcf in 1995, while in 1999 spot purchases of LNG totaled 60.2 Bcf. Currently, there are only two operational LNG receiving terminals in the United States: Lake Charles, Louisiana, and Everett, Massachusetts. However, a third facility at Elba Island, Georgia, is planned to open to receive LNG beginning in mid-2002. Work has begun and the operator has a contract for 80 Bcf per year from the Atlantic LNG facility in Trinidad for seventeen years.

During the past decade, imported natural gas supplies have increased from 8 percent of the annual U.S. natural gas consumption in 1990 to 16 percent through November 1999. In 1999, gas imports in the first 11 months increased by 13 percent, over the comparable period of 1998. U.S. market demand for natural gas imports remains apparent. For example, even with the addition of 700MMcf/d operational capacity to the Northern Border Pipeline System (NBPS), imported gas transported by the pipeline has continued to flow at maximum capacity of 96 to 97 percent. Prior to the expansion, the NBPS was being utilized at a level slightly above 100 percent of designed capacity (possible through line-packing). The strong demand for new sources of natural gas indicate potential for continued growth of imports to U.S. markets.

Highlights

Overview

This issue of the *Natural Gas Monthly* includes two special reports. The first report, "Next Generation * Natural Gas (NG)² Information Requirements Executive Summary," describes the draft set of data requirements developed by the Energy Information Administration to meet customer needs for information in the restructured natural gas industry. The second report, "Increasing Importance of Natural Gas Imports on the U.S. Marketplace," discusses the growth of natural gas imports in U.S. markets. Natural gas data estimates provided in this issue of the *Monthly* run through February 2000 for many data series at the national level. Estimates of natural gas prices are available through November 1999 for most series. Highlights of the data estimates contained in this issue are:

- Net storage withdrawals in February 2000 are 535 billion cubic feet, 29 percent lower than in January 2000, but significantly higher than in February of the previous 2 years.
- The daily rate of end-use consumption of natural gas for January through February 2000 is 1 percent higher than for the same period in 1999.
- The cumulative average wellhead price for January through November 1999 is \$2.07 per thousand cubic feet, 6 percent higher than for the same period in 1998.

Supply

Dry natural gas production is estimated to be 1,501 billion cubic feet for February 2000, 51.8 billion cubic feet per day (Table 1) and nearly 2 percent less the daily rate for January 2000. However, cumulatively for the months of January and February, production is estimated to be 3,132 billion cubic feet, a daily rate of 52.2 billion cubic feet per day. This rate is nearly 1 percent higher than the daily rate of 51.9 billion cubic feet seen during the first 2 months of 1999.¹

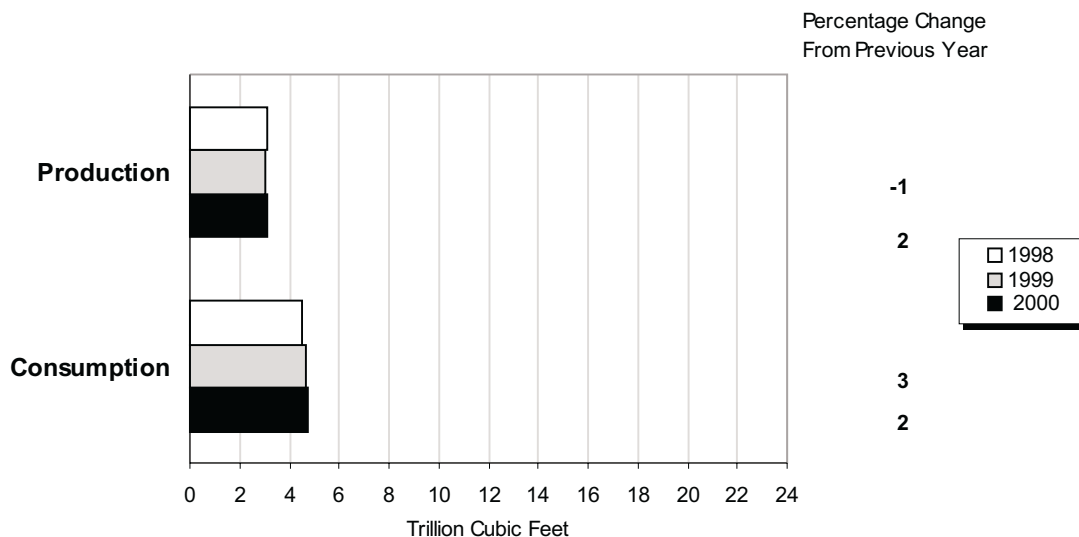
Cumulative net imports through February 2000 are estimated to be 612 billion cubic feet, 10 percent higher than cumulative net imports for the first 2 months of 1999. Net imports for February 2000 are estimated to be 300 billion cubic feet, 38 billion cubic feet or 15 percent larger than net imports for last February. Shipments of liquefied natural gas (LNG) from the Atlantic LNG project in Trinidad contributed to the increase. The first shipments from this facility reached the United States in May 1999. Also, there continues to be a high utilization rate of the U.S.-Canadian crossborder capacity.

With only 1 month of the 1999-2000 heating season left, there is an estimated 1,224 billion cubic feet of working gas in storage at the end of February, 568 billion cubic feet less than the level 1 year ago. Net withdrawals of natural gas from underground storage for February 2000 are estimated to be 535 billion

Beginning with the March issue of the *Natural Gas Monthly*, processing of the monthly natural gas underground storage survey will be done on a new computer system. Although we do not anticipate any processing delays other than those normally encountered, preparation of the storage tables may be delayed because of this transition. We apologize for any inconvenience.

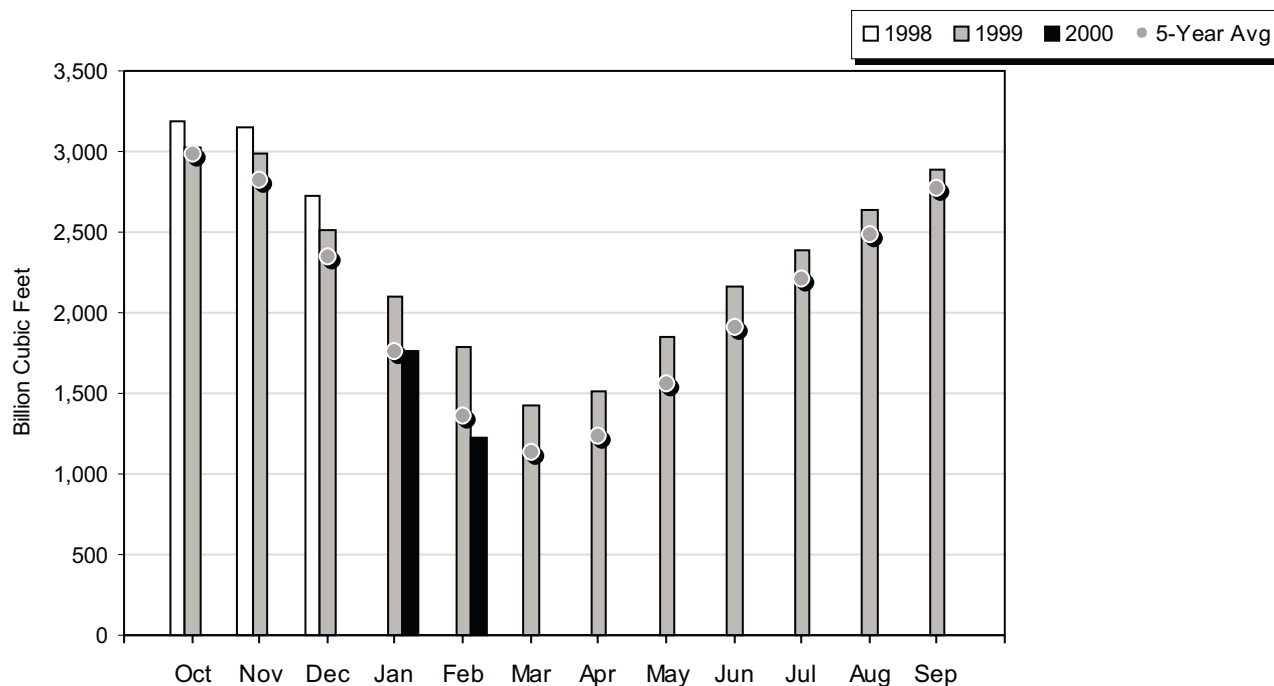
1 The period January through February 2000 includes 60 days because February is a 29-day month this year. In 1999, the period January through February included 59 days.

Figure HI1. Natural Gas Production and Consumption, January-February, 1998-2000



Source: Table 2.

Figure HI2. Working Gas in Underground Storage in the United States, 1998-2000



Note: The 5-year average is calculated using the latest available monthly data. For example, the December average is calculated from December storage levels for 1995 to 1999 while the January average is calculated from January levels for 1996 to 2000. Data are reported as of the end of the month, thus October data represent the beginning of the heating season.

Source: Form EIA-191, "Underground Natural Gas Storage Report," Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition," and Short-Term Integrated Forecasting System.

cubic feet. This is 215 billion cubic feet or 29 percent less than withdrawals in January 2000, which showed the second-largest monthly net withdrawal from storage ever. However, net withdrawals for February 2000 are considerably higher than net withdrawals during February 1999 and 1998 (61 and 84 percent higher, respectively) when temperatures were generally warmer than normal.

End-Use Consumption

Cumulatively for January through February 2000, end-use consumption of natural gas is estimated to be 4,418 billion cubic feet or 73.6 billion cubic feet per day, 1 percent above the daily rate for the first 2 months of 1999 (Table 3). Even though cold weather settled into the Midwest and Northeast from mid-January through early February, residential consumption of natural gas during the first 2 months of 2000 is somewhat lower than in 1999. Cumulative residential consumption for January through February 2000 is estimated to be 1,582 billion cubic feet or 26.4 billion cubic feet per day, 2 percent lower than the daily rate for the same period in 1999. In contrast to the residential sector, the daily rate of natural gas consumption in both the commercial and industrial sectors was 2 percent higher for January through February 2000 compared with the first 2 months of 1999. In the electric utility sector, where monthly data are available only through November

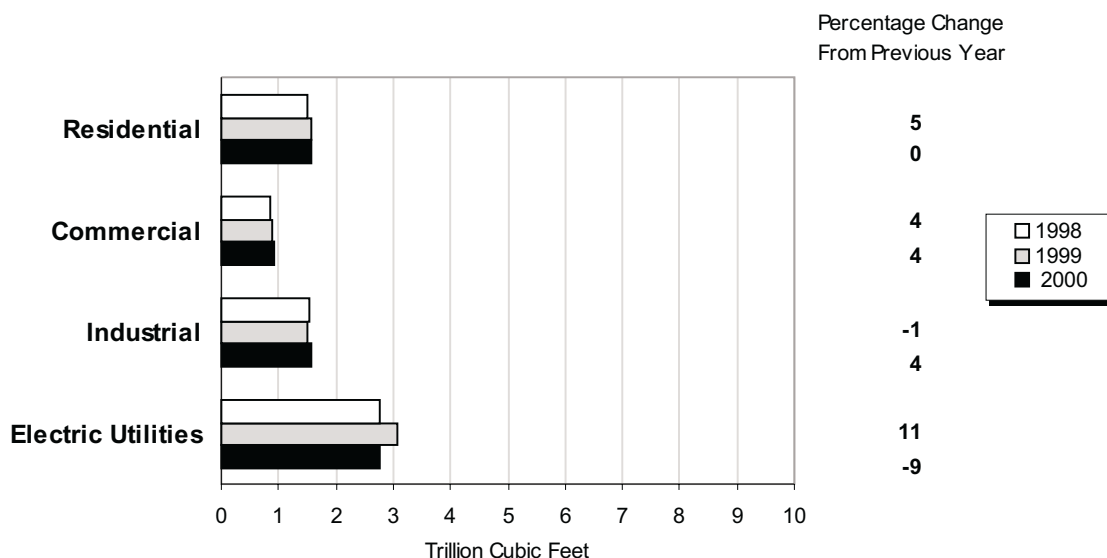
1999, cumulative consumption of natural gas for January through November is estimated to be 2,951 billion cubic feet, 4 percent lower than for the same period in 1998 (Figure HI3).

The rise in fuel oil prices this winter has raised concerns about whether fuel oil demand was significantly affected by natural gas customers switching to oil, especially in the Northeast. Some large-volume energy consumers, lacking a contract for firm gas service year-round, purchase fuel oil when their gas service is interrupted. Questions about the diversity of fuels available in the Northeast and the impact of gas service interruptions will be the focus of two studies currently underway at the Department of Energy. The Energy Information Administration will support these efforts by examining issues related to the natural gas and fuel oil markets. The first report is expected to be available by late April 2000.

Prices

The cumulative average wellhead price for January through November 1999 is higher than in 1998, yet most end-use prices are lower than in 1998 (Figure HI4). The national average wellhead price for January through November 1999 is estimated to be \$2.07 per thousand cubic feet, 6 percent higher than in

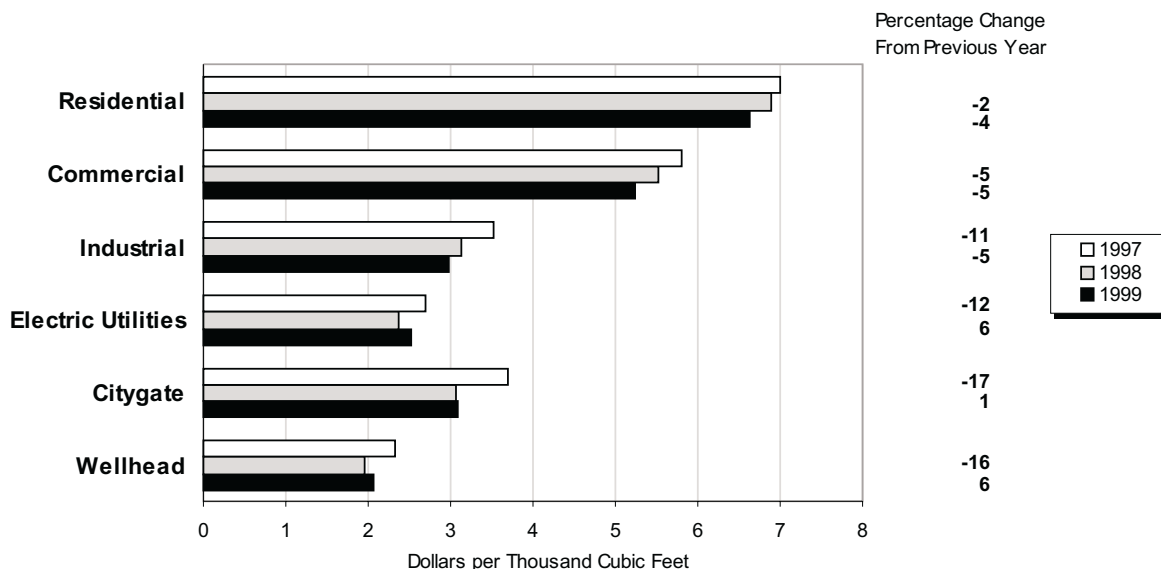
Figure HI3. Natural Gas Delivered to Consumers, January-February, 1998-2000



Note: Electric utilities reflect January-November deliveries for 1997-1999.

Source: Table 3.

Figure HI4. Average Delivered and Wellhead Natural Gas Prices, January–November, 1997–1999



Note: Commercial and industrial average prices reflect onsystem sales only. The reporting of electric utility prices is 1 month behind the reporting of other prices.

Source: Table 4.

1998 (Table 4). The wellhead price actually began the year below the levels seen in 1998, but the 1999 monthly average has been at least 25 percent higher than the 1998 level since August. The November 1999 estimate of \$2.44 per thousand cubic feet is 26 percent above the November 1998 level.

The cumulative average price paid for natural gas by residential users for January through November 1999 is estimated to be \$6.63 per thousand cubic feet, 4 percent lower than in 1998. The prices paid by the commercial and industrial² sectors during the same period are both 5 percent lower than in 1998. The average commercial price for January through November 1999 is estimated to be \$5.23 per thousand cubic feet while the industrial estimate is \$2.98 per thousand cubic feet.

The electric utility sector paid an estimated average \$2.53 per thousand cubic feet for natural gas for January through October 1999. While this is 6 percent

higher than during the same period in 1998, it is 6 percent lower than during 1997.

Lower storage levels at the end of February 2000, compared with last year, contributed to closing prices on the New York Merchantile Exchange (NYMEX) futures market at the Henry Hub that were nearly the same for both the February and March delivery contracts. The February contract closed at \$2.610 per million Btu on January 27, while the March contract closed at \$2.603 per million Btu on February 25. The difference between the two closing prices is usually somewhat larger, with the March closing price being below that of the February contract.

The closing price on the March 2000 contract was nearly \$1.00 per million Btu above that of the March 1999 contract (Figure HI5). Differences in storage levels and the price of crude oil during the early months of the year contributed to the different futures price levels. In early 1999, West Texas Intermediate crude

2 End-use prices in the residential, commercial, and industrial sectors are for onsystem gas sales only. While monthly onsystem sales are nearly 100 percent of residential deliveries, during 1999 they have ranged from 54 to 73 percent of commercial deliveries and only 15 to 18 percent of industrial deliveries (Table 4).

oil was selling for about \$12.00 per barrel, and there was 1,792 billion cubic feet of working gas in storage at the end of February. In early 2000, the West Texas oil price reached \$30.00 per barrel by late February, near

to a 9-year high for these prices, and there was 1,224 billion cubic feet of working gas by the end of the month.³

Figure HI5. Daily Futures Settlement Prices at the Henry Hub



Note: The futures price is for the near-month contract, that is, for the next contract to terminate trading. Contracts are traded on the New York Mercantile Exchange. April 1 is the beginning of the natural gas storage refill season. November 1 is the beginning of the heating season.
Source: Commodity Futures Trading Commission, Division of Economic Analysis.

3 Energy Information Administration, *Natural Gas Weekly Market Update*. <http://www.eia.doe.gov> (February 28, 2000).

Table 1. Summary of Natural Gas Production in the United States, 1994-2000
(Billion Cubic Feet)

Year and Month	Gross Withdrawals	Repressuring	Nonhydrocarbon Gases Removed ^a	Vented and Flared	Marketed Production (Wet)	Extraction Loss ^b	Dry Gas Production ^c
1994 Total	23,581	3,231	412	228	19,710	889	18,821
1995 Total	23,744	3,565	388	284	19,506	908	18,599
1996 Total	24,114	3,511	518	272	19,812	958	18,854
1997 Total	24,213	3,492	599	256	19,866	964	18,902
1998							
January	2,093	307	48	19	1,719	82	1,637
February	1,877	291	49	17	1,520	73	1,448
March	2,081	310	51	20	1,700	81	1,619
April	1,994	284	50	20	1,640	78	1,562
May	2,035	266	47	16	1,705	81	1,624
June	1,975	271	49	21	1,634	78	1,556
July	2,002	265	51	20	1,666	80	1,586
August	2,024	273	53	20	1,678	80	1,598
September	1,874	276	51	20	1,527	73	1,454
October	2,026	297	58	21	1,650	79	1,571
November	1,954	292	52	20	1,591	76	1,515
December	1,988	302	51	20	1,615	77	1,538
Total	23,924	3,433	611	234	19,646	938	18,708
1999							
January	^{RE} 2,083	^E 317	^E 58	^E 20	^{RE} 1,687	^E 82	^{RE} 1,605
February	^E 1,878	^E 274	^E 54	^E 18	^{RE} 1,533	^E 74	^E 1,458
March	^{RE} 2,084	^E 307	^E 59	^E 21	^{RE} 1,696	^E 82	^{RE} 1,614
April	^{RE} 1,965	^E 289	^E 42	^E 21	^{RE} 1,613	^E 78	^{RE} 1,535
May	^{RE} 2,002	^E 264	^E 44	^E 21	^{RE} 1,673	^E 81	^{RE} 1,592
June	^{RE} 1,966	^E 279	^{RE} 43	^E 21	^{RE} 1,623	^{RE} 79	^{RE} 1,545
July	^{RE} 2,001	^E 283	^E 44	^E 21	^{RE} 1,653	^E 80	^{RE} 1,573
August	^{RE} 1,983	^{RE} 282	^E 42	^E 20	^{RE} 1,640	^{RE} 80	^{RE} 1,560
September	^{RE} 1,933	^{RE} 262	^E 43	^E 21	^{RE} 1,607	^{RE} 78	^{RE} 1,529
October	^{RE} 2,057	^{RE} 325	^{RE} 45	^{RE} 23	^{RE} 1,664	^E 81	^{RE} 1,583
November	^{RE} 1,956	^{RE} 285	^{RE} 43	^{RE} 21	^E 1,608	^E 78	^E 1,530
December	^E 2,037	^E 299	^E 45	^E 22	^E 1,671	^E 81	^E 1,590
Total	^{RE} 23,946	^{RE} 3,465	^{RE} 560	^{RE} 251	^{RE} 19,668	^E 954	^{RE} 18,715
2000							
<i>January(STIFS)</i>	NA	NA	NA	NA	^E 1,712	^E 81	^E 1,631
<i>February(STIFS)</i>	NA	NA	NA	NA	^E 1,576	^E 75	^E 1,501
2000 YTD	NA	NA	NA	NA	^E 3,289	^E 157	^E 3,132
1999 YTD	^E 3,961	^E 591	^E 112	^E 39	^E 3,220	^E 156	^E 3,064
1998 YTD	3,970	597	97	36	3,240	155	3,085

^a See Appendix A, Explanatory Note 1, for a discussion of data on Nonhydrocarbon Gases Removed.

^b Extraction loss is only collected on an annual basis. Annually it is between 4 and 5 percent of marketed production. Monthly extraction loss is estimated from monthly marketed production by assuming that the preceding annual percentage remains constant for the next twelve months.

^c Equal to marketed production (wet) minus extraction loss.

^E Estimated Data.

^{RE} Revised Estimated Data.

NA Not Available.

Notes: Data for 1994 through 1998 are final. All other data are preliminary

unless otherwise indicated and contain estimates for selected States (see Table 7). Estimates for the most recent two months are derived from the Short-Term Integrated Forecasting System (STIFS). Geographic coverage is the 50 States and the District of Columbia. Totals may not equal sum of components because of independent rounding.

Sources: 1994-1998: Energy Information Administration (EIA), *Natural Gas Annual 1998*. January 1999 through current month: Form EIA-895, "Monthly Quantity of Natural Gas Report," STIFS, and EIA estimates. See Appendix A, Explanatory Notes 1, 3, and 6, for discussion of computation and estimation procedures and revision policies.

Table 2. Supply and Disposition of Dry Natural Gas in the United States, 1994-2000
(Billion Cubic Feet)

Year and Month	Dry Gas Production	Supplemental Gaseous Fuels ^a	Net Imports	Net Storage Withdrawals ^b	Balancing Item ^c	Consumption ^d
1994 Total	18,821	111	2,462	-286	-400	20,708
1995 Total	18,599	110	2,687	415	-230	21,581
1996 Total	18,854	109	2,784	2	217	21,967
1997 Total	18,902	103	2,837	24	92	21,959
1998						
January	1,637	11	270	486	-2	2,401
February	1,448	9	240	301	114	2,111
March	1,619	10	244	255	-4	2,123
April	1,562	8	240	-206	102	1,705
May	1,624	7	242	-402	29	1,500
June	1,556	6	230	-336	6	1,462
July	1,586	8	255	-326	49	1,572
August	1,598	8	264	-286	-1	1,583
September	1,454	7	250	-231	-10	1,471
October	1,571	8	253	-269	-81	1,482
November	1,515	10	246	32	-85	1,717
December	1,538	11	259	452	-131	2,129
Total	18,708	102	2,993	-530	-11	21,262
1999						
January	^{RE} 1,605	^E 10	295	623	0	2,534
February	^E 1,458	^E 8	262	333	50	2,111
March	^{RE} 1,614	^E 8	276	297	^R -47	2,148
April	^{RE} 1,535	^E 8	267	-91	^R 49	1,768
May	^{RE} 1,592	^E 8	272	-337	^R -11	^R 1,523
June	^{RE} 1,545	^E 6	264	-306	^R -77	^R 1,432
July	^{RE} 1,573	^E 7	276	-225	^R -116	^R 1,515
August	^{RE} 1,560	^E 8	^E 298	-238	^R -46	^R 1,581
September	^{RE} 1,529	^E 7	^E 292	-310	^R -73	1,444
October	^{RE} 1,583	^E 8	^E 295	-148	^R -237	^R 1,502
November	^E 1,530	^{RE} 8	^{RE} 294	30	^R -172	1,690
December	^E 1,590	^E 9	^E 305	514	^E -234	^R 2,185
Total	^{RE} 18,715	^{RE} 96	^{RE} 3,397	^R 141	^{RE} -915	^R 21,433
2000						
<i>January(STIFS)</i>	^E 1,631	^E 13	^E 312	^E 750	^E -196	^E 2,510
<i>February(STIFS)</i>	^E 1,501	^E 10	^E 300	^E 535	^E -98	^E 2,248
2000 YTD	^E 3,132	^E 23	^E 612	^E 1,285	^E -294	^E 4,758
1999 YTD	^E 3,064	^E 18	557	956	50	4,644
1998 YTD	3,085	19	509	787	112	4,513

^a Supplemental gaseous fuels data are only collected on an annual basis except for the Dakota Gasification Inc. coal gasification facility which provides data each month. The ratio of annual supplemental fuels (excluding Dakota Gasification Inc.) to the sum of dry gas production, net imports, and net withdrawals from storage is calculated. This ratio, which varies between .0022 and .0037, is applied to the monthly sum of these three elements. The Dakota Gasification Inc. monthly value is added to the result to produce the monthly supplemental fuels estimate.

^b Monthly and annual data for 1994 through 1998 include underground storage and liquefied natural gas storage. Data for January 1999 forward include underground storage only. See Appendix A, Explanatory Note 7 for discussion of computation procedures.

^c Represents quantities lost and imbalances in data due to differences among data sources. See Appendix A, Explanatory Note 9, for full discussion.

^d Consists of pipeline fuel use, lease and plant fuel use, vehicle fuel, and deliveries to consuming sectors as shown in Table 3.

^R Revised Data.

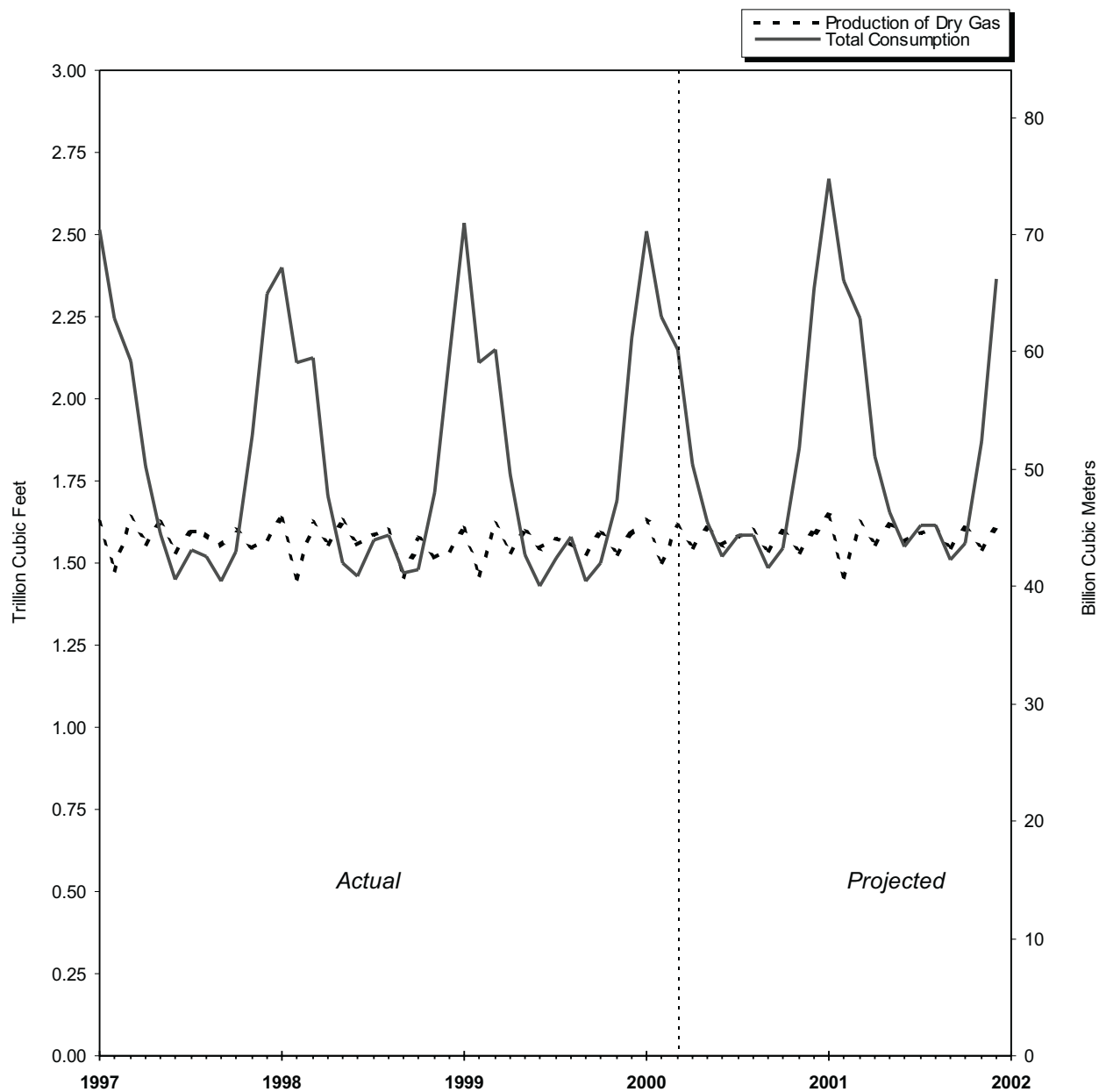
^E Estimated Data.

^{RE} Revised Estimated Data.

Notes: Data for 1994 through 1998 are final. All other data are preliminary unless otherwise indicated. Estimates for the most recent two months are derived from the Short-Term Integrated Forecasting System (STIFS). Geographic coverage is the 50 States and the District of Columbia. Totals may not equal sum of components because of independent rounding.

Sources: 1994-1998: Energy Information Administration (EIA), *Natural Gas Annual 1998*. 1998: EIA-895, "Monthly Quantity of Natural Gas Report," Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers," Form EIA-191, "Monthly Underground Gas Storage Report," and Office of Fossil Energy, U.S. Department of Energy, Natural Gas Imports and Exports and EIA computations. January 1999 through current month: EIA, Form EIA-895, Form EIA-857, Form EIA-191, EIA computations, and estimates, Short-Term Integrated Forecasting System (STIFS) computations, and Office of Fossil Energy, Natural Gas Imports and Exports. See Appendix A for discussion of computation and estimation procedures and revision policies.

Figure 1. Production and Consumption of Natural Gas in the United States, 1997-2001



Sources: 1997 through the current month: Table 2. Projected data: Energy Information Administration, *Short-Term Energy Outlook*.

Table 3. Natural Gas Consumption in the United States, 1994-2000

(Billion Cubic Feet)

Year and Month	Lease and Plant Fuel ^a	Pipeline Fuel ^b	Delivered to Consumers					Total Consumption
			Residential	Commercial ^c	Industrial	Electric Utilities	Total	
1994 Total	1,124	685	4,848	2,897	8,167	2,987	18,899	20,708
1995 Total	1,220	700	4,850	3,034	8,580	3,197	19,660	21,581
1996 Total	1,250	711	5,241	3,161	8,870	2,732	20,006	21,967
1997 Total	1,203	751	4,984	3,219	8,832	2,968	20,004	21,959
1998								
January	101	73	812	451	793	171	2,227	2,401
February	90	64	692	393	739	134	1,957	2,111
March	101	64	648	367	750	194	1,959	2,123
April	97	51	408	256	704	190	1,558	1,705
May	99	44	221	170	676	290	1,357	1,500
June	96	43	153	138	654	379	1,323	1,462
July	97	47	132	142	704	449	1,428	1,572
August	98	47	117	144	719	457	1,438	1,583
September	90	44	121	140	695	381	1,337	1,471
October	98	44	203	173	718	246	1,340	1,482
November	94	51	398	264	732	178	1,572	1,717
December	96	64	616	362	803	189	1,969	2,129
Total	1,157	635	4,520	3,005	8,686	3,258	19,469	21,262
1999								
January	^E 106	76	903	480	791	179	2,352	2,534
February	^E 96	63	680	395	725	152	1,952	2,111
March	^E 106	64	660	383	728	206	1,978	2,148
April	^E 101	53	417	261	682	256	1,615	1,768
May	^E 105	46	234	180	686	273	1,373	^R 1,523
June	^{RE} 102	43	155	144	664	324	1,287	^R 1,432
July	^E 103	45	129	140	661	436	1,366	^R 1,515
August	^E 103	47	118	145	^R 734	434	^R 1,431	^R 1,581
September	^{RE} 101	43	136	144	^R 739	281	^R 1,301	1,444
October	^E 104	45	225	^R 188	700	240	1,352	^R 1,502
November	^E 101	51	359	252	757	171	1,539	1,690
December(STIFS)	^E 105	^E 66	^E 655	^E 379	^E 805	^{NA}	^R 2,014	^R 2,185
Total	^E 1,232	^{RE} 641	^{RE} 4,670	^{RE} 3,091	^{RE} 8,672	^{NA}	^R 19,560	^R 21,433
2000								
January(STIFS)	^E 105	^E 75	^E 858	^E 478	^E 803	^{NA}	^E 2,330	^E 2,510
February(STIFS)	^E 97	^E 63	^E 724	^E 428	^E 767	^{NA}	^E 2,088	^E 2,248
2000 YTD^d	203	138	1,582	906	1,570	^{NA}	4,418	4,758
1999 YTD^d	202	139	1,583	875	1,516	2,951	4,304	4,644
1998 YTD^d	192	137	1,504	843	1,532	3,069	4,184	4,513

^a Plant fuel data are only collected on an annual basis and monthly lease fuel data are only collected annually. Lease and plant fuel estimates have been between 6 and 7 percent of marketed production annually. Monthly lease and plant fuel use is estimated from monthly marketed production by assuming that the preceding annual percentage remains constant for the next twelve months.

^b Pipeline fuel use is only collected on an annual basis. Annually it is between 3 and 4 percent of total consumption. Monthly pipeline fuel data are estimated from monthly total consumption(excluding pipeline fuel) by assuming that the preceding annual percentage remains constant for the next twelve months.

^c Deliveries to Commercial consumers for 1994-1998 include vehicle fuel deliveries, which totaled, in billion cubic feet, 1.7 in 1994, 2.7 in 1995, 2.9 in 1996, 4.4 in 1997, and 5.1 in 1998.

^d Year-to-date volume represents months for which volume information is available in the current year.

^R Revised Data.

^E Estimated Data.

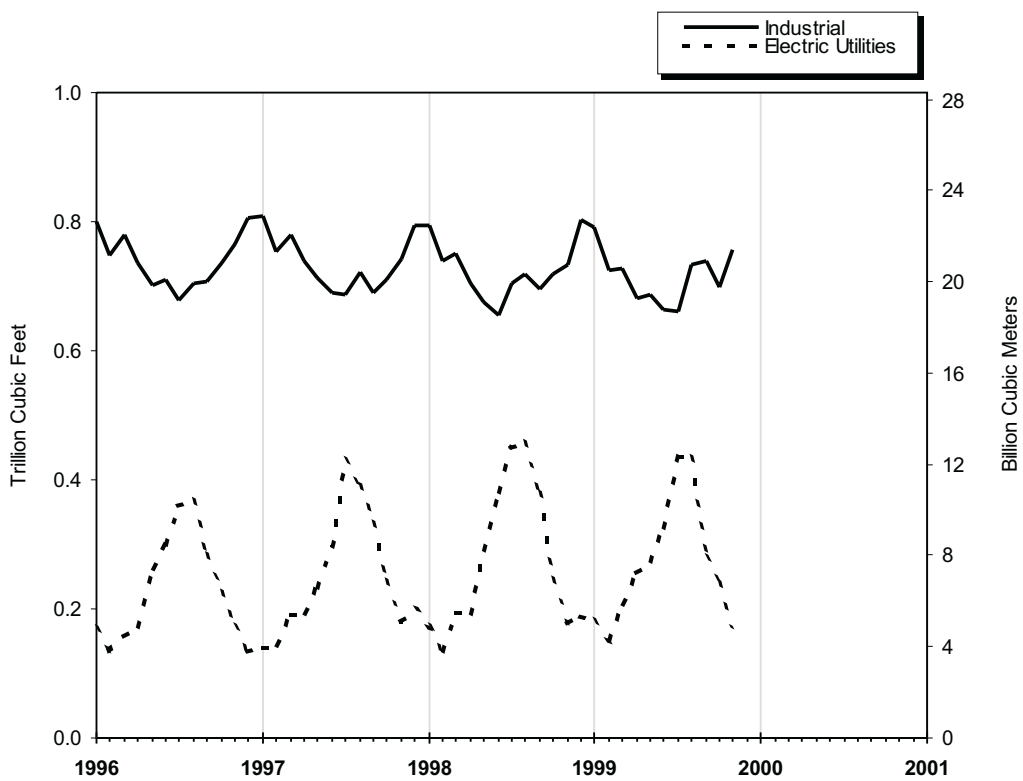
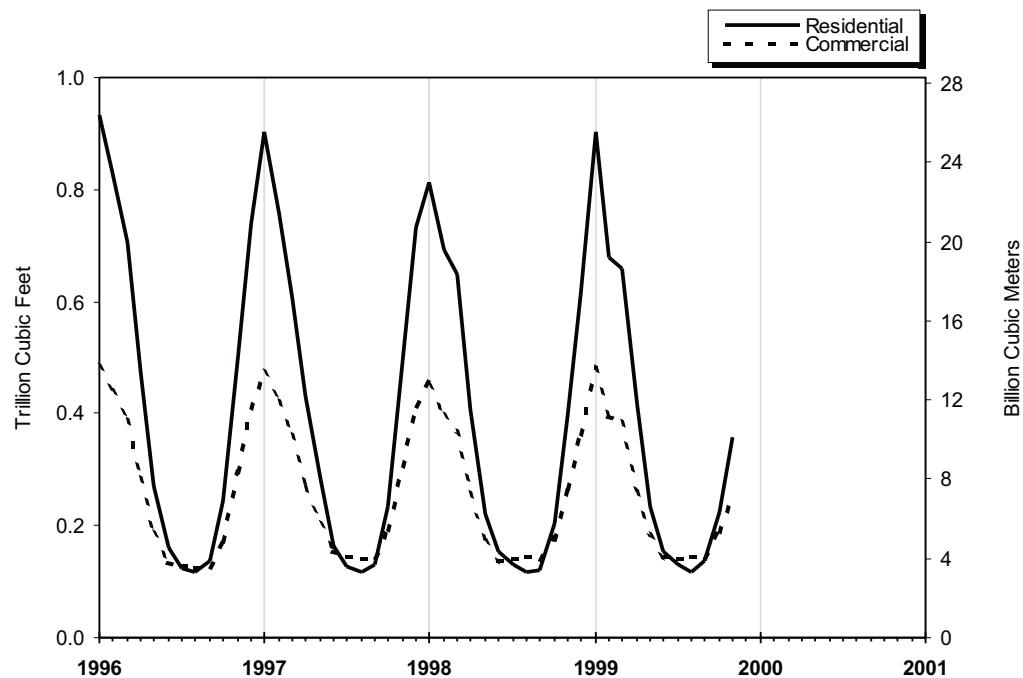
^{RE} Revised Estimated Data.

^{NA} Not Available.

Notes: Data for 1994 through 1998 are final. All other data are preliminary unless otherwise indicated. Estimates for the most recent three months are derived from the Short-Term Integrated Forecasting System (STIFS). Geographic coverage is the 50 States and the District of Columbia. Totals may not equal sum of components because of independent rounding. In 1996, consumption of natural gas for agricultural use is classified as industrial use. In 1995 and earlier years, agricultural use was classified as commercial use. See Explanatory Note 5 for further explanation.

Sources: 1994-1998: Energy Information Administration (EIA): Form EIA-627, "Annual Quantity and Value of Natural Gas Report," (thru 1994), Form EIA-895 "Monthly Quantity of Natural Gas Report," (1995 forward), Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers," Form EIA-759, "Monthly Power Plant Report," EIA computations, and *Natural Gas Annual 1998*. January 1999 through the current month: EIA: Form EIA-895, Form EIA-857, Form EIA-759, and STIFS computations. See Appendix A, Explanatory Note 5, for computation procedures and revision policy.

Figure 2. Natural Gas Deliveries to Consumers in the United States, 1996-1999



Source: Table 3.

Table 4. Selected National Average Natural Gas Prices, 1993-1999

(Dollars per Thousand Cubic Feet)

Year and Month	Wellhead Price ^a	City Gate Price	Delivered to Consumers					
			Residential Price	Commercial		Industrial		Electric Utilities Price
				Price	% of Total ^b	Price	% of Total ^b	
1993 Annual Average	2.04	3.21	6.16	5.22	83.9	3.07	29.7	2.61
1994 Annual Average	1.85	3.07	6.41	5.44	79.3	3.05	25.5	2.28
1995 Annual Average	1.55	2.78	6.06	5.05	76.7	2.71	24.5	2.02
1996 Annual Average	2.17	3.34	6.34	5.40	77.6	3.42	19.4	2.69
1997								
January	3.40	4.28	6.74	6.19	78.7	4.60	17.5	4.06
February	2.49	3.76	6.79	6.14	78.3	4.18	17.8	2.97
March	1.79	3.07	6.52	5.73	73.9	3.34	17.9	2.29
April	1.81	2.92	6.53	5.46	71.8	3.10	18.0	2.30
May	2.00	3.11	6.83	5.39	65.5	3.04	17.6	2.41
June	2.08	3.41	8.30	5.64	61.6	3.19	17.5	2.52
July	2.00	3.44	8.78	5.35	59.4	3.11	17.6	2.44
August	2.08	3.34	8.99	5.43	57.9	3.00	17.7	2.53
September	2.33	3.50	8.84	5.58	59.4	3.32	17.4	2.96
October	2.68	3.86	7.69	5.74	62.8	3.69	17.7	3.24
November	2.92	4.76	6.86	5.86	70.3	4.02	17.6	3.41
December	2.28	3.42	6.54	5.72	72.9	3.74	17.7	2.77
Annual Average	2.32	3.66	6.94	5.80	70.8	3.59	18.1	2.78
1998								
January	1.95	3.08	6.41	5.65	73.2	3.67	16.8	2.64
February	1.95	3.08	6.41	5.59	72.9	3.58	16.7	2.51
March	2.05	3.06	6.29	5.40	73.6	3.40	17.3	2.53
April	2.15	3.23	6.81	5.64	67.7	3.28	15.8	2.59
May	2.04	3.12	7.70	5.73	62.6	3.14	14.9	2.47
June	1.90	2.98	8.51	5.51	62.9	2.97	15.1	2.40
July	2.08	3.31	8.53	5.64	56.0	3.04	13.1	2.50
August	1.81	3.01	9.25	5.46	53.3	2.75	13.8	2.21
September	1.69	2.78	8.96	5.49	57.0	2.65	14.2	2.15
October	1.85	2.99	7.60	5.31	59.2	2.75	14.8	2.22
November	1.93	2.99	6.58	5.22	64.5	2.95	15.7	2.37
December	1.94	3.10	6.34	5.23	68.3	2.92	17.2	2.22
Annual Average	1.94	3.07	6.82	5.48	67.0	3.14	16.1	2.40
1999								
January	^E 1.80	2.84	5.97	5.08	72.7	3.07	15.4	2.25
February	^E 1.73	2.94	6.23	5.17	68.8	2.97	15.5	2.27
March	^E 1.70	2.67	6.00	5.00	67.9	2.76	16.6	2.11
April	^E 1.81	2.91	6.32	5.70	64.4	2.79	15.8	2.25
May	^E 2.10	3.25	7.07	5.14	^R 61.0	2.65	17.0	2.48
June	^E 2.10	3.18	7.91	5.23	58.9	2.84	16.9	2.47
July	^E 2.07	3.11	8.47	5.23	56.8	2.88	17.6	2.52
August	^E 2.34	3.37	8.83	^R 5.30	53.6	3.03	17.9	2.80
September	^E 2.42	3.50	8.38	5.40	58.1	3.09	17.0	2.86
October	^E 2.31	3.50	7.54	^R 5.34	^R 60.7	3.15	15.9	2.83
November	^E 2.44	3.75	7.11	5.46	63.7	3.45	17.8	^{NA}
1999 YTD ^c	^E 2.07	3.09	6.63	5.23	64.9	2.98	16.7	2.53
1998 YTD ^c	1.95	3.06	6.90	5.52	66.8	3.14	15.3	2.38
1997 YTD ^c	2.33	3.70	7.01	5.81	70.5	3.52	17.7	2.70

^a See Appendix A, Explanatory Note 8, of the *Natural Gas Monthly (NGM)* for discussion of wellhead prices.

^b Percentage of total deliveries represented by onsystem sales, see Figure 6. See Table 25 for breakdown by State.

^c Year-to-date price represents months for which price information is available in the current year.

^R Revised Data.

^E Estimated Data.

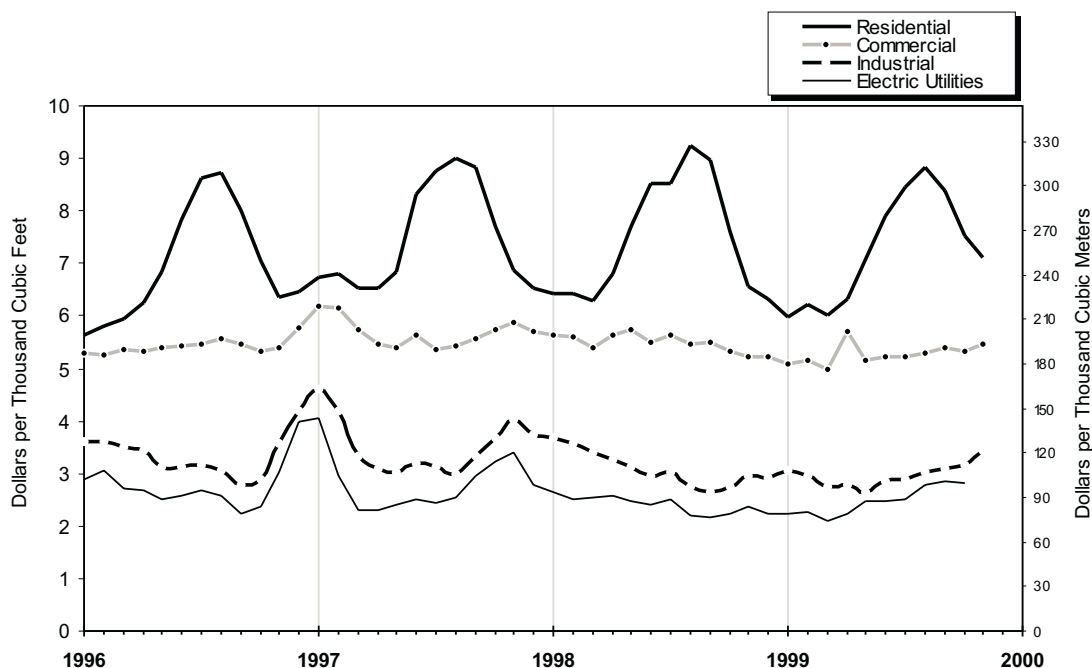
NA Not Available.

Notes: Data for 1993 through 1998 are final. All other data are preliminary unless otherwise indicated. Geographic coverage is the 50

States and the District of Columbia. In 1996, consumption of natural gas for agricultural use is classified as industrial use. In 1995 and earlier years, agricultural use was classified as commercial use. See Explanatory Note 5 for further explanation.

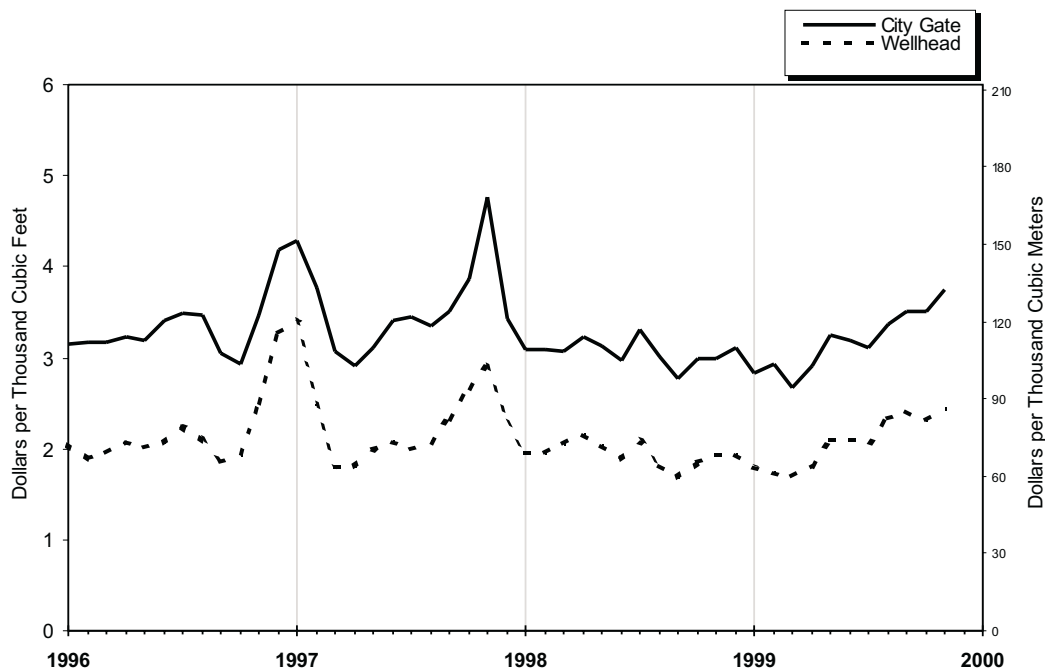
Sources: 1993-1998: Energy Information Administration (EIA) *Natural Gas Annual 1998*. 1999 forward: EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers," Form FERC-423, "Monthly Report of Cost and Quality of Fuels for Electric Plants," and EIA estimates. January 1998 through current month: See Appendix A, Explanatory Note 8 for estimation procedures and revision policy.

Figure 3. Average Price of Natural Gas Delivered to Consumers in the U.S., 1996-1999



Source: Table 4

Figure 4. Average Price of Natural Gas in the United States, 1996-1999



Source: Table 4

Table 5. U.S. Natural Gas Imports, by Country, 1993-1999

(Volumes in Million Cubic Feet, Prices in Dollars per Thousand Cubic Feet)

Year and Month	Pipeline				LNG			
	Canada		Mexico		Algeria		Australia	
	Volume	Average Price	Volume	Average Price	Volume	Average Price	Volume	Average Price
1993 Total	2,266,751	2.02	1,678	1.94	81,685	2.20	0	—
1994 Total	2,566,049	1.86	7,013	1.99	50,778	2.28	0	—
1995 Total	2,816,408	1.48	6,722	1.53	17,918	2.30	0	—
1996 Total	2,883,277	1.96	13,862	2.25	35,325	2.70	0	—
1997								
January	266,756	3.27	1,555	3.09	7,560	2.78	0	—
February	230,352	2.50	2,526	2.49	7,667	3.00	0	—
March	251,328	1.70	3,127	1.83	2,530	2.98	0	—
April	235,431	1.66	189	1.92	2,557	2.23	0	—
May	234,345	1.81	2,380	2.03	2,552	2.20	2,455	2.68
June	225,366	1.87	1,692	2.20	5,059	2.49	0	—
July	229,479	1.82	1,088	1.98	5,026	2.48	0	—
August	237,142	1.81	6	2.35	7,535	2.43	0	—
September	232,090	2.00	29	2.47	5,030	2.41	2,337	2.88
October	245,742	2.32	965	2.92	5,050	2.70	0	—
November	257,782	2.71	1,874	2.82	7,542	2.89	4,893	3.07
December	253,338	2.17	1,810	2.12	7,567	2.88	0	—
Total	2,899,152	2.15	17,243	2.31	65,675	2.67	9,686	2.92
1998								
January	276,118	2.06	55	2.12	10,105	2.51	0	—
February	239,091	1.90	2,184	2.04	7,606	2.51	2,171	3.99
March	257,485	1.97	380	2.20	5,166	2.50	0	—
April	247,363	2.03	3,249	2.37	2,549	2.52	0	—
May	243,868	2.00	845	2.15	7,596	2.51	0	—
June	235,847	1.86	5	2.21	5,149	2.51	2,441	2.91
July	259,412	1.96	1,821	2.13	5,086	2.52	0	—
August	268,535	1.80	1,413	1.78	2,540	2.52	2,321	2.92
September	254,752	1.66	2,257	1.86	5,133	2.52	0	—
October	260,135	1.92	905	1.65	5,023	2.50	0	—
November	247,971	2.09	0	—	5,042	2.51	2,353	3.55
December	261,495	2.14	1,418	1.77	7,572	2.51	2,348	3.18
Total	3,052,073	1.95	14,532	2.03	68,567	2.51	11,634	3.30
1999								
January	290,266	1.98	4,891	1.76	12,612	2.47	0	—
February	258,656	1.89	4,398	1.71	7,423	2.51	2,557	3.56
March	279,161	1.82	751	1.61	12,648	2.70	0	—
April	265,973	1.84	4,192	2.04	7,639	2.46	0	—
May	270,034	2.17	6,843	1.97	3,900	2.67	0	—
June	256,251	2.13	4,978	2.14	2,528	1.96	2,314	2.34
July	271,431	2.27	3,876	2.24	5,133	2.19	0	—
August	287,657	2.49	6,028	2.64	2,554	2.19	2,302	2.35
September	283,625	2.74	4,643	2.42	7,593	2.51	0	—
October	290,306	NA	^E 4,643	NA	5,120	NA	2,309	NA
November	^F 288,378	NA	^E 4,643	NA	2,440	NA	0	—
December	^E 298,726	NA	^E 4,643	NA	5,022	NA	2,422	NA
Total	^E3,340,465	NA	^E54,529	NA	74,612	NA	11,903	NA

See footnotes at end of table.

Table 5. U.S. Natural Gas Imports, by Country, 1993-1999

(Volumes in Million Cubic Feet, Prices in Dollars per Thousand Cubic Feet) — Continued

Year and Month	LNG								Total	
	Qatar		Trinidad		United Arab Emirates		Other		Volume	Average Price
	Volume	Average Price	Volume	Average Price	Volume	Average Price	Volume	Average Price		
1993 Total	0	—	0	—	0	—	0	—	2,350,115	2.03
1994 Total	0	—	0	—	0	—	0	—	2,623,839	1.87
1995 Total	0	—	0	—	0	—	0	—	2,841,048	1.49
1996 Total	0	—	0	—	4,949	3.46	0	—	2,937,413	1.97
1997										
January	0	—	0	—	2,417	3.74	0	—	278,288	3.26
February	0	—	0	—	0	—	0	—	240,545	2.52
March	0	—	0	—	0	—	0	—	256,985	1.72
April	0	—	0	—	0	—	0	—	238,178	1.67
May	0	—	0	—	0	—	0	—	241,732	1.83
June	0	—	0	—	0	—	0	—	232,118	1.88
July	0	—	0	—	0	—	0	—	235,593	1.84
August	0	—	0	—	0	—	0	—	244,684	1.83
September	0	—	0	—	0	—	0	—	239,486	2.01
October	0	—	0	—	0	—	0	—	251,758	2.33
November	0	—	0	—	0	—	0	—	272,091	2.72
December	0	—	0	—	0	—	0	—	262,716	2.19
Total	0	—	0	—	2,417	3.74	0	—	2,994,173	2.17
1998										
January	0	—	0	—	0	—	0	—	286,278	2.08
February	0	—	0	—	0	—	0	—	251,052	1.94
March	0	—	0	—	0	—	0	—	263,032	1.98
April	0	—	0	—	0	—	0	—	253,161	2.04
May	0	—	0	—	0	—	0	—	252,310	2.02
June	0	—	0	—	0	—	0	—	243,442	1.88
July	0	—	0	—	0	—	0	—	266,319	1.97
August	0	—	0	—	0	—	0	—	274,809	1.82
September	0	—	0	—	0	—	0	—	262,142	1.68
October	0	—	0	—	0	—	0	—	266,063	1.93
November	0	—	0	—	2,667	2.78	0	—	258,033	2.12
December	0	—	0	—	2,585	2.47	0	—	275,417	2.16
Total	0	—	0	—	5,252	2.63	0	—	3,152,058	1.97
1999										
January	0	—	0	—	0	—	0	—	307,769	2.00
February	2,481	2.75	0	—	0	—	0	—	275,515	1.93
March	0	—	0	—	0	—	0	—	292,560	1.86
April	2,492	1.93	0	—	0	—	0	—	280,296	1.86
May	0	—	5,493	1.90	0	—	0	—	286,270	2.17
June	2,417	1.98	6,620	2.08	0	—	0	—	275,109	2.13
July	2,388	2.60	6,599	2.10	0	—	0	—	289,428	2.27
August	0	—	9,898	2.50	0	—	^a 2,576	^R 2.37	311,014	2.49
September	4,987	2.71	4,393	2.55	0	—	0	—	305,242	2.73
October	0	—	4,394	NA	0	—	0	—	^E 306,771	NA
November	2,374	NA	6,657	NA	^R 2,713	NA	0	—	^{RE} 307,206	NA
December	2,392	NA	5,256	NA	0	—	0	—	^E 318,460	NA
Total	19,532	NA	49,310	NA	2,713	NA	2,576	2.37	^E 3,555,640	NA

^a Received from Malaysia.^R Revised Data.^E Estimated Data.^{RE} Revised Estimated Data.

NA Not Available.

— Not Applicable.

Sources: 1993-1994: Energy Information Administration, Form FPC-14, "Annual Report for Importers and Exporters of Natural Gas." January 1995 through the current month (except estimates): Office of Fossil Energy, U.S. Department of Energy, *Natural Gas Imports and Exports*. Estimated pipeline data (shown with an "E") are taken from data from the National Energy Board of Canada plus EIA estimates. LNG data: Industry reports.

Table 6. U.S. Natural Gas Exports, by Country, 1993-1999

(Volumes in Million Cubic Feet, Prices in Dollars per Thousand Cubic Feet)

Year and Month	Pipeline				LNG				Total	
	Canada		Mexico		Japan		Mexico		Volume	Average Price
	Volume	Average Price	Volume	Average Price	Volume	Average Price	Volume	Average Price		
1993 Total	44,518	2.14	39,676	2.02	55,989	3.34	0	—	140,183	2.59
1994 Total	52,556	2.42	46,500	1.68	62,682	3.18	0	—	161,738	2.50
1995 Total	27,554	1.96	61,283	1.50	65,283	3.41	0	—	154,119	2.39
1996 Total	51,905	2.67	33,840	2.11	67,648	3.65	0	—	153,393	2.97
1997										
January	4,193	4.08	2,231	4.08	5,604	4.25	0	—	12,028	4.16
February	5,169	3.02	1,677	2.32	5,596	4.20	0	—	12,443	3.46
March	9,115	2.05	1,486	1.55	5,675	4.16	0	—	16,276	2.74
April	5,168	1.78	3,044	1.83	5,660	4.06	0	—	13,872	2.72
May	4,107	2.08	2,177	1.96	3,812	3.83	0	—	10,097	2.72
June	3,162	2.28	2,579	2.14	3,786	3.72	0	—	9,527	2.81
July	3,257	2.14	3,122	2.17	3,756	3.66	0	—	10,136	2.71
August	3,820	2.15	6,282	2.37	7,532	3.62	0	—	17,633	2.86
September	3,129	2.37	6,159	2.59	3,767	3.58	0	—	13,055	2.83
October	2,432	2.85	4,182	2.87	5,676	3.58	0	—	12,289	3.19
November	5,579	3.10	1,782	3.16	5,691	3.66	0	—	13,051	3.35
December	7,318	2.58	3,650	2.30	5,631	3.58	0	—	16,600	2.86
Total	56,447	2.52	38,372	2.46	62,187	3.83	0	—	157,006	3.02
1998										
January	4,930	2.53	4,257	2.11	7,446	3.67	0	—	16,632	2.93
February	4,502	2.11	3,117	2.06	3,726	3.42	0	—	11,346	2.53
March	7,851	2.25	4,202	2.14	7,435	3.09	0	—	19,488	2.55
April	4,509	2.47	2,675	2.23	5,702	2.81	0	—	12,886	2.57
May	2,083	2.28	6,119	2.12	1,891	2.70	0	—	10,093	2.26
June	1,938	2.03	5,617	1.98	5,695	2.69	0	—	13,250	2.29
July	1,634	1.97	3,852	2.20	5,679	2.70	0	—	11,166	2.42
August	52	1.87	4,834	1.95	5,676	2.70	1	5.88	10,563	2.35
September	1,481	2.09	2,892	1.81	7,584	2.68	0	—	11,957	2.40
October	2,127	2.03	5,167	1.90	5,679	2.72	3	5.74	12,975	2.28
November	3,630	2.17	5,079	2.00	3,776	2.75	9	5.69	12,494	2.28
December	5,152	2.26	5,323	1.99	5,662	2.73	20	5.68	16,157	2.34
Total	39,891	2.25	53,133	2.04	65,951	2.91	33	5.69	159,007	2.45
1999										
January	2,373	1.91	4,526	1.83	5,587	2.61	24	7.48	12,510	2.20
February	3,360	1.94	4,753	1.74	5,563	2.49	28	7.46	13,704	2.11
March	4,883	1.80	5,950	1.64	5,570	2.75	22	7.41	16,425	2.07
April	2,300	1.79	5,049	1.89	5,699	2.48	19	7.23	13,067	2.14
May	2,512	2.26	6,109	2.29	5,586	2.70	24	7.47	14,231	2.45
June	2,255	2.16	5,278	2.32	3,723	2.41	19	7.34	11,275	2.33
July	2,347	2.21	5,613	2.36	5,675	3.13	19	7.20	13,654	2.66
August	2,419	2.44	5,400	2.75	5,628	2.70	19	7.40	13,466	2.68
September	2,301	2.82	5,267	2.94	5,604	2.95	22	7.35	13,194	2.93
October	^E 2,301	NA	^E 5,267	NA	3,723	NA	NA	NA	^E 11,291	NA
November	^E 2,301	NA	^E 5,267	NA	5,580	NA	NA	NA	^E 13,148	NA
December	^E 2,301	NA	^E 5,267	NA	5,577	NA	NA	NA	^E 13,145	NA
Total	^E 31,653	NA	^E 63,746	NA	63,514	NA	NA	NA	^E 159,109	NA

^E Estimated Data.

NA Not Available.

— Not Applicable.

Sources: 1993-1994: Energy Information Administration, Form FPC-14, "Annual Report for Importers and Exporters of Natural Gas." January 1995

through the current month (except estimates): Office of Fossil Energy, U.S. Department of Energy, *Natural Gas Imports and Exports*. Estimated pipeline data (shown with an "E") are taken from data from the National Energy Board of Canada plus EIA estimates. LNG data: Industry reports.

Table 7. Marketed Production of Natural Gas, by State, 1993-1999

(Million Cubic Feet)

Year and Month	Alabama ^b	Alaska	Arizona	California	Colorado	Florida	Kansas
1993 Total	388,024	430,350	597	315,851	400,985	7,085	686,347
1994 Total	515,272	555,402	752	309,427	453,207	7,486	712,730
1995 Total	519,661	469,550	558	279,555	523,084	6,463	721,436
1996 Total	530,841	480,828	463	286,494	572,071	6,006	712,796
1997							
January	48,213	43,497	46	24,430	52,755	527	60,198
February	46,024	39,391	41	21,876	48,424	512	55,275
March	51,313	42,625	42	23,910	53,954	610	60,099
April	51,246	38,687	39	23,248	52,529	554	58,357
May	48,802	35,427	36	23,590	52,376	541	61,661
June	47,342	36,344	28	22,928	50,715	450	59,996
July	46,370	36,284	31	23,981	52,964	514	58,234
August	46,314	36,270	30	23,841	54,041	505	61,937
September	48,911	37,041	30	23,760	52,742	519	49,658
October	50,634	40,095	34	24,437	54,260	452	53,815
November	49,734	39,631	57	24,792	55,549	439	54,152
December	48,368	43,020	39	24,896	57,064	491	53,834
Total	583,272	468,311	452	285,690	637,375	6,114	687,215
1998							
January	46,466	43,382	43	24,752	57,511	503	53,032
February	41,653	39,244	42	22,151	52,954	491	48,698
March	46,476	42,479	53	22,708	58,795	592	52,948
April	46,281	38,540	43	21,952	57,586	531	51,415
May	48,978	35,281	38	23,894	57,916	513	54,334
June	49,638	36,217	34	24,871	55,989	426	52,862
July	50,131	36,171	42	27,157	57,737	486	51,324
August	49,215	36,118	36	29,727	58,584	472	54,059
September	42,308	36,884	32	29,114	57,005	498	43,419
October	47,503	39,958	31	30,467	60,868	423	47,058
November	46,682	39,483	33	29,508	59,592	401	47,359
December	48,447	42,890	33	28,974	61,783	459	47,078
Total	563,779	466,648	457	315,277	696,321	5,796	603,586
1999							
January	32,042	43,848	31	29,268	^{RE} 55,910	517	^R 52,200
February	29,023	39,443	27	26,541	^E 62,221	448	^R 43,801
March	31,836	42,685	36	30,361	^E 68,086	494	^R 47,290
April	28,413	^E 37,537	38	29,808	^E 66,011	459	^R 45,904
May	33,517	^E 33,279	41	30,944	^E 66,741	427	^R 46,147
June	32,295	^E 35,853	45	28,553	^E 64,410	392	^R 46,452
July	32,356	^E 36,229	60	30,744	^E 66,424	^R 503	^R 44,878
August	^R 32,180	^R 34,246	51	31,632	^E 69,632	^R 570	^R 45,540
September	^{RE} 32,532	^R 32,790	43	31,288	^E 65,688	^R 526	43,299
October	^E 34,035	39,580	43	32,560	^E 69,966	^E 429	^E 46,187
1999 YTD	^E318,230	^E375,489	415	301,699	^E655,088	^E4,765	^E461,698
1998 YTD	468,649	384,275	391	256,795	574,946	4,936	509,149
1997 YTD	485,170	385,660	357	236,002	524,761	5,184	579,229

See footnotes at end of table.

Table 7. Marketed Production of Natural Gas, by State, 1993-1999

(Million Cubic Feet) — Continued

Year and Month	Louisiana ^b	Michigan	Mississippi	Montana	New Mexico	North Dakota	Oklahoma
1993 Total	4,991,138	204,635	80,695	54,528	1,409,429	59,851	2,049,942
1994 Total	5,169,705	222,657	63,448	50,416	1,557,689	57,805	1,934,864
1995 Total	5,108,366	238,203	95,533	50,264	1,625,837	49,468	1,811,734
1996 Total	5,289,742	245,740	103,263	50,996	1,554,087	49,674	1,734,887
1997							
January	445,257	34,940	8,253	4,654	135,263	3,952	144,608
February	405,366	16,875	7,807	4,451	122,656	3,899	134,455
March	447,802	24,790	8,470	4,836	137,830	4,453	147,098
April	431,010	12,944	8,120	4,654	132,438	4,364	136,246
May	443,269	39,819	8,611	4,561	136,553	4,539	142,336
June	425,934	19,314	8,893	3,808	125,256	4,348	138,038
July	434,326	40,026	8,636	4,114	131,806	4,427	144,769
August	438,965	18,597	9,626	4,213	134,140	4,486	147,528
September	430,599	22,451	9,162	4,199	128,915	4,381	150,488
October	445,702	20,297	10,084	3,150	134,623	4,508	145,054
November	434,908	26,013	9,683	4,706	120,856	4,416	135,537
December	446,682	29,885	9,955	5,091	118,298	4,629	137,731
Total	5,229,821	305,950	107,300	52,437	1,558,633	52,401	1,703,888
1998							
January	453,867	28,460	9,639	4,831	130,265	4,623	158,897
February	409,480	8,278	8,574	4,569	118,164	4,039	126,200
March	459,364	30,780	9,781	4,892	132,729	4,344	136,334
April	452,863	17,823	8,957	4,683	127,544	4,311	134,115
May	471,279	29,198	9,121	4,978	131,488	4,529	140,400
June	451,104	26,958	8,586	4,448	120,632	4,304	136,013
July	454,637	26,171	9,258	4,636	126,924	4,460	134,510
August	457,279	18,896	8,834	4,594	129,164	4,546	139,914
September	363,707	28,491	8,664	4,750	124,152	4,435	134,805
October	433,764	21,816	8,868	5,040	129,640	4,610	138,167
November	431,629	12,013	8,602	5,044	116,404	4,465	134,583
December	448,896	29,193	9,184	5,182	113,991	4,520	130,592
Total	5,287,870	278,076	108,068	57,645	1,501,098	53,185	1,644,531
1999							
January	^E 466,143	20,853	9,154	^E 4,947	134,745	4,331	^E 144,408
February	425,121	8,746	8,678	^E 4,700	134,071	3,858	^E 122,928
March	463,776	39,892	9,933	^E 5,002	134,084	4,220	^E 133,354
April	450,953	22,653	9,426	^E 4,749	134,098	4,298	^E 131,587
May	474,329	25,273	9,708	^E 4,894	^R 134,008	4,335	^E 139,036
June	^E 464,118	25,120	9,480	^E 4,118	^R 133,918	4,329	^E 133,557
July	468,257	24,043	9,542	^E 4,340	^R 133,828	4,570	^E 132,444
August	468,679	19,291	9,406	^E 4,552	^R 133,738	4,540	^E 133,202
September	444,299	24,696	9,198	^E 4,621	135,075	4,431	^E 132,151
October	^E 447,547	^E 21,772	9,050	^E 4,527	136,426	4,613	^E 137,584
1999 YTD	^E4,573,222	^E232,339	93,574	^E46,450	1,343,990	43,524	^E1,340,251
1998 YTD	4,407,345	236,870	90,283	47,419	1,270,703	44,201	1,379,355
1997 YTD	4,348,230	250,052	87,662	42,640	1,319,479	43,356	1,430,620

See footnotes at end of table.

Table 7. Marketed Production of Natural Gas, by State, 1993-1999

(Million Cubic Feet) — Continued

Year and Month	Oregon	Texas ^c	Utah	Wyoming	Other ^a States	U.S. Total
1993 Total	4,003	6,249,624	225,401	634,957	788,472	18,981,915
1994 Total	3,221	6,353,844	270,858	696,018	774,724	19,709,525
1995 Total	1,923	6,330,048	241,290	673,775	759,728	19,506,474
1996 Total	1,439	6,470,620	250,767	666,036	805,491	19,812,241
1997						
January	105	554,934	21,782	59,016	66,589	1,709,020
February	98	506,768	19,115	55,848	59,659	1,548,536
March	101	564,269	21,912	61,159	64,046	1,719,319
April	102	539,499	19,570	64,278	60,894	1,638,779
May	102	552,230	22,053	62,726	62,075	1,701,306
June	97	529,765	19,815	59,667	58,840	1,611,580
July	98	546,610	21,711	60,324	58,719	1,673,945
August	99	548,267	21,024	61,091	59,919	1,670,894
September	86	525,836	22,007	64,678	57,035	1,632,496
October	97	540,150	23,006	64,992	63,152	1,678,542
November	91	519,274	22,840	62,181	61,087	1,625,944
December	96	526,271	22,307	62,410	64,665	1,655,732
Total	1,173	6,453,873	257,139	738,368	736,679	19,866,093
1998						
January	90	550,623	21,826	66,238	64,219	1,719,267
February	79	497,583	21,758	59,825	56,464	1,520,246
March	96	548,845	23,656	64,659	60,395	1,699,925
April	92	531,219	23,513	61,338	57,355	1,640,161
May	92	545,368	24,967	65,642	57,484	1,705,500
June	90	522,691	23,968	59,655	55,586	1,634,073
July	95	536,998	23,036	63,534	58,630	1,665,937
August	94	542,707	23,681	63,228	56,789	1,677,936
September	90	507,526	21,554	63,059	56,609	1,527,103
October	83	529,662	23,830	65,994	61,915	1,649,698
November	85	509,919	23,045	64,618	57,038	1,590,505
December	80	495,612	22,507	63,523	62,259	1,615,203
Total	1,067	6,318,754	277,340	761,313	704,742	19,645,554
1999						
January	83	542,129	23,467	62,582	^E 60,348	^{RE} 1,687,006
February	84	490,865	21,141	55,832	^E 55,142	^{RE} 1,532,671
March	120	534,240	23,878	67,624	^E 59,456	^{RE} 1,696,365
April	111	507,927	22,076	61,885	^E 55,351	^{RE} 1,613,284
May	113	526,518	^R 22,771	64,838	^E 56,407	^{RE} 1,673,325
June	111	501,865	^R 21,828	63,028	^E 53,875	^{RE} 1,623,345
July	110	521,504	^R 21,707	66,127	^E 55,164	^{RE} 1,652,830
August	74	517,063	^R 21,491	58,535	^E 55,466	^{RE} 1,639,888
September	90	503,267	^E 22,082	66,255	^E 54,270	^{RE} 1,606,601
October	124	525,498	^E 23,411	71,680	^E 59,148	^E 1,664,179
1999 YTD	1,019	5,170,876	^E223,853	638,385	^E564,628	^E16,389,495
1998 YTD	901	5,313,223	231,789	633,172	585,445	16,439,846
1997 YTD	986	5,408,329	211,993	613,778	610,927	16,584,417

^a Includes Arkansas, Illinois, Indiana, Kentucky, Maryland, Missouri, Nebraska, Nevada, New York, Ohio, Pennsylvania, South Dakota, Tennessee, Virginia and West Virginia. The 1998 monthly values for these States are estimated.

^b For Alabama and Louisiana, all data for 1993 through 1998 include Federal Offshore production. For 1999, Alabama data do not include Federal Offshore production, while data for Louisiana include both the Louisiana and Alabama portions of Federal Offshore Production.

^c Federal offshore production volumes are included.

^R Revised Data.

^E Estimated Data.

^{RE} Revised Estimated Data.

Notes: Data for 1993 through 1998 are final. All other data are preliminary unless otherwise indicated. Totals may not equal sum of components because of independent rounding. See Appendix A, Explanatory Notes 1 and 3 for discussion of computation procedures and revision policy.

Sources: 1993-1998: Energy Information Administration (EIA), *Natural Gas Annual 1998*. 1999 through current month: Form EIA-895, "Monthly Quantity of Natural Gas Report," Minerals Management Service reports, and EIA computations.

Table 8. Gross Withdrawals and Marketed Production of Natural Gas by State, October 1999
(Million Cubic Feet)

State	Gross Withdrawals			Repressuring	Nonhydrocarbon Gases Removed ^a	Vented and Flared	Marketed Production
	From Gas Wells	From Oil Wells	Total				
Alabama	£36,831	£622	£37,453	£1,324	£2,003	£91	£34,035
Alaska	14,823	288,439	303,262	262,925	0	757	39,580
Arizona	43	0	43	0	0	0	43
California	8,079	28,197	36,276	3,463	170	83	32,560
Colorado	£61,201	£9,444	£70,645	£603	0	£76	£69,966
Florida	0	£485	£485	0	£56	0	£429
Kansas	£41,981	£4,331	£46,312	£79	0	£46	£46,187
Louisiana	£393,838	£59,205	£453,044	£3,553	0	£1,944	£447,547
Michigan	£17,719	£4,430	£22,149	£156	0	£222	£21,772
Mississippi	9,882	436	10,318	520	525	223	9,050
Montana	£3,988	£544	£4,532	£5	0	0	£4,527
New Mexico	128,607	22,473	151,080	919	13,491	245	136,426
North Dakota	1,341	3,509	4,850	0	6	232	4,613
Oklahoma	£124,121	£13,463	£137,584	£0	£0	£0	£137,584
Oregon	150	0	150	5	21	0	124
Texas	465,938	112,743	578,682	37,449	13,300	2,435	525,498
Utah	£21,148	£3,328	£24,476	£59	0	£1,005	£23,411
Wyoming	110,543	5,757	116,300	14,091	15,255	15,275	71,680
Other States	£56,718	£3,043	£59,761	£95	£411	£107	£59,148
Total	£1,496,952	£560,449	£2,057,400	£325,246	£45,235	£22,740	£1,664,179

^a See Appendix A, Explanatory Note 1, for a discussion of data on Nonhydrocarbon Gases Removed.

£ Estimated Data.

Notes: All monthly data are considered preliminary until publication of the

Natural Gas Annual for that year. Totals may not equal sum of components because of independent rounding. See Appendix A, Explanatory Notes 1 and 3 for discussion of computation procedures and revision policy.

Sources: Form EIA-895, "Monthly Quantity of Natural Gas Report."

Table 9. Underground Natural Gas Storage - All Operators, 1994-2000

(Volumes in Billion Cubic Feet)

Year and Month	Natural Gas in Underground Storage at End of Period			Change In Working Gas from Same Period Previous Year		Storage Activity		
	Base Gas	Working Gas	Total ^b	Volume	Percent	Injections	Withdrawals	Net Withdrawals ^c
1994 Total^a	4,360	2,606	6,966	284	12.2	2,796	2,508	-288
1995 Total^a	4,349	2,153	6,503	-453	-17.4	2,566	2,974	408
1996 Total^a	4,341	2,173	6,513	19	0.9	2,906	2,911	6
1997 Total^a	4,350	2,175	6,525	2	0.1	2,800	2,824	24
1998								
January	4,347	1,712	6,060	215	14.5	69	538	468
February	4,342	1,426	5,768	286	25.2	75	365	291
March	4,342	1,183	5,524	192	19.4	136	382	246
April	4,339	1,386	5,725	334	31.9	280	80	-200
May	4,341	1,774	6,114	407	29.9	433	42	-391
June	4,335	2,114	6,449	381	22.1	379	52	-327
July	4,378	2,428	6,806	409	20.4	371	54	-317
August	4,340	2,698	7,038	358	15.4	336	58	-278
September	4,341	2,928	7,269	253	9.6	298	74	-224
October	4,342	3,191	7,533	302	10.6	308	46	-262
November	4,344	3,155	7,499	453	16.9	137	168	31
December	4,326	2,730	7,056	554	25.5	83	519	436
Total	—	—	—	—	—	2,905	2,379	-526
1999								
January	4,327	2,094	6,421	381	22.2	55	678	623
February	4,312	1,792	6,104	372	26.2	62	395	333
March	^d 4,361	^d 1,430	5,792	246	20.7	84	381	297
April	4,355	1,514	5,869	131	9.5	203	112	-91
May	4,346	1,847	6,192	72	4.0	380	43	-337
June	4,344	2,157	6,501	54	2.6	345	40	-306
July	4,350	2,390	6,740	-27	-1.1	303	78	-225
August	4,342	2,632	6,974	-66	-2.4	309	70	-238
September	4,360	2,884	7,245	-43	-1.5	352	42	-310
October	4,360	3,026	7,386	-165	-5.2	238	90	-148
November	4,364	2,991	7,355	-164	-5.2	170	200	30
December	4,373	2,509	6,881	-221	-8.1	54	568	514
Total	—	—	—	—	—	^R 2,555	^R 2,697	^R 141
2000								
January(STIFS)	^{RE} 4,373	^{RE} 1,759	^{RE} 6,132	^{RE} -335	^{RE} -16.0	NA	NA	^E 750
February(STIFS)	^E 4,373	^E 1,224	^E 5,597	^E -567	^E -31.7	NA	NA	^E 535

^a Total as of December 31.^b Total underground storage capacity at the end of each calendar year (in billion cubic feet): 1994 - 8,043; 1995 - 7,927; 1996 - 8,159; 1997 - 8,128; and 1998 - 8,179.^c Negative numbers indicate the volume of injections in excess of withdrawals. Positive numbers indicate the volume of withdrawals in excess of injections.^d Reflects one respondent's reclassification of natural gas in underground storage from working gas to base gas.^R Revised Data.^E Estimated Data.^{RE} Revised Estimated Data.

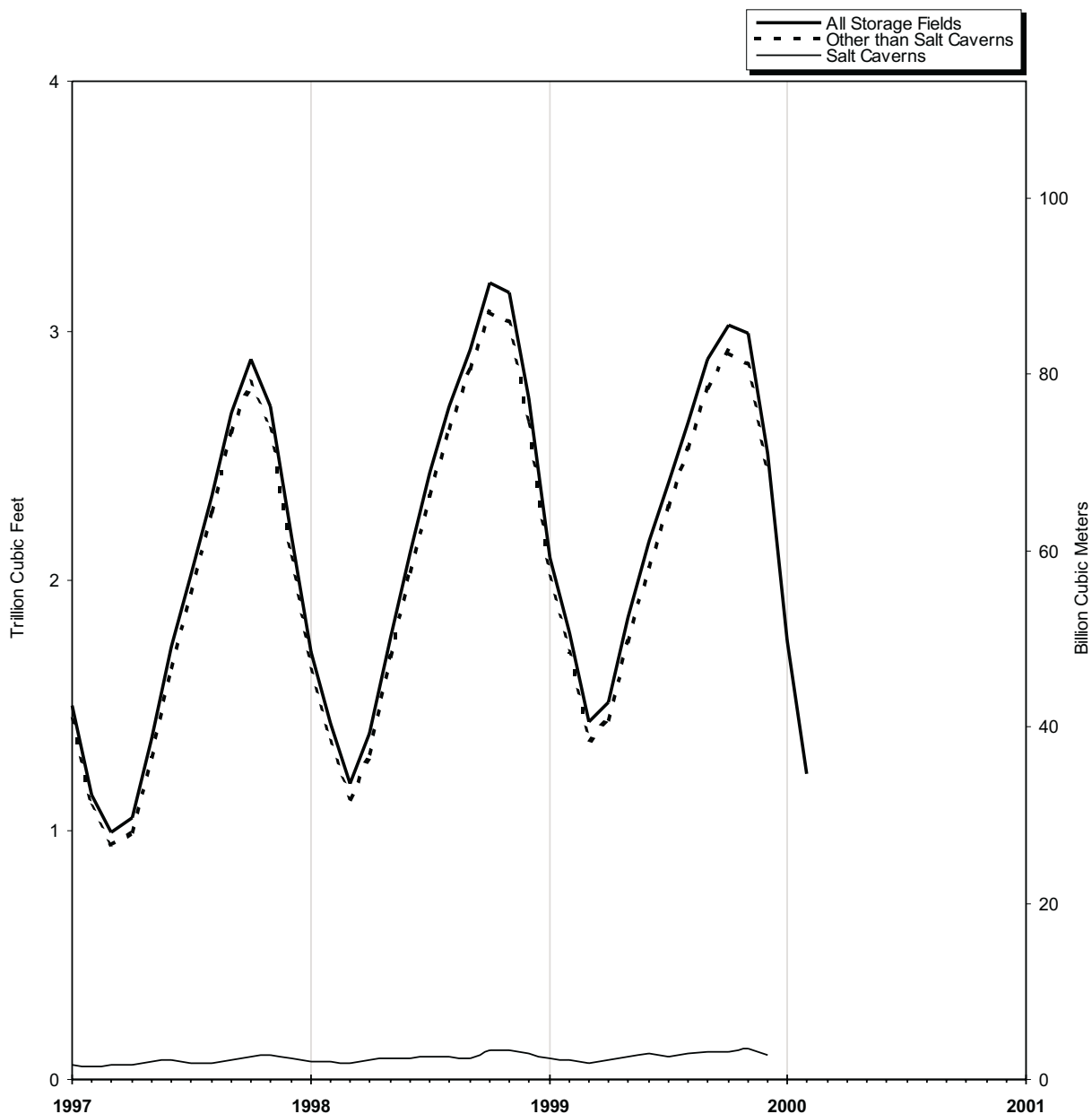
NA Not Available.

— Not Applicable.

Notes: Data for 1994 through 1998 are final. All other data are preliminary unless otherwise noted. Estimates for the most recent two months are derived from the Short-Term Integrated Forecasting System (STIFS). See Explanatory Note 7 of the *Natural Gas Monthly* for discussion of revision policy. Gas in storage at the end of a reporting period may not equal the quantity derived by adding or subtracting net injections or withdrawals during the period to the quantity of gas in storage at the beginning of the period. Totals may not equal sum of components because of independent rounding. Geographic coverage is the 50 States and the District of Columbia.

Sources: Form EIA-191, "Monthly Underground Gas Storage Report," Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition," and STIFS.

Figure 5. Working Gas in Underground Natural Gas Storage in the U.S., 1997-2000



Sources: Energy Information Administration, Form EIA-191, "Monthly Underground Gas Storage Report," and Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition."

Table 10. Underground Natural Gas Storage - by Season, 1998-2000
(Volumes in Billion Cubic Feet)

Year, Season and Month	Natural Gas in Underground Storage at End of Period			Change In Working Gas from Same Period Previous Year		Storage Activity		
	Base Gas	Working Gas	Total	Volume	Percent	Injections	Withdrawals	Net Withdrawals ^a
March 1998	4,342	1,183	5,524	192	19.4	136	382	246
1998 Refill Season								
April	4,339	1,386	5,725	334	31.9	280	80	-200
May	4,341	1,774	6,114	407	29.9	433	42	-391
June	4,335	2,114	6,449	381	22.1	379	52	-327
July	4,378	2,428	6,806	409	20.4	371	54	-317
August	4,340	2,698	7,038	358	15.4	336	58	-278
September	4,341	2,928	7,269	253	9.6	298	74	-224
October	4,342	3,191	7,533	302	10.6	308	46	-262
Total	—	—	—	—	—	2,405	407	-1,998
1998-1999 Heating Season								
November	4,344	3,155	7,499	453	16.9	137	168	31
December	4,326	2,730	7,056	554	25.5	83	519	436
January	4,327	2,094	6,421	381	22.2	55	678	623
February	4,312	1,792	6,104	372	26.2	62	395	333
March	^b 4,361	^b 1,430	5,792	246	20.7	84	381	297
Total	—	—	—	—	—	422	2,141	1,719
1999 Refill Season								
April	4,355	1,514	5,869	131	9.5	203	112	-91
May	4,346	1,847	6,192	72	4.0	380	43	-337
June	4,344	2,157	6,501	54	2.6	345	40	-306
July	4,350	2,390	6,740	-27	-1.1	303	78	-225
August	4,342	2,632	6,974	-66	-2.4	309	70	-238
September	4,360	2,884	7,245	-43	-1.5	352	42	-310
October	4,360	3,026	7,386	-165	-5.2	238	90	-148
Total	—	—	—	—	—	2,130	474	-1,656
1999-2000 Heating Season								
November	4,364	2,991	7,355	-164	-5.2	170	200	30
December	4,373	2,509	6,881	-221	-8.1	54	568	514
January(STIFS)	^{RE} 4,373	^{RE} 1,759	^{RE} 6,132	^{RE} -335	^{RE} -16.0	^{NA}	^{NA}	^E 750
February(STIFS)	^E 4,373	^E 1,224	^E 5,597	^E -567	^E -31.7	^{NA}	^{NA}	^E 535

^a Negative numbers indicate the volume of injections in excess of withdrawals. Positive numbers indicate the volume of withdrawals in excess of injections.

^b Reflects one respondent's reclassification of natural gas in underground storage from working gas to base gas.

^E Estimated Data.

^{RE} Revised Estimated Data.

^{NA} Not Available.

— Not Applicable.

Notes: Data for 1998 are final. All other data are preliminary unless otherwise noted. Estimates for the most recent two months are derived from the Short-Term Integrated Forecasting System (STIFS). See Explanatory Note

7 of the *Natural Gas Monthly* for discussion of revision policy. Gas in storage at the end of a reporting period may not equal the quantity derived by adding or subtracting net injections or withdrawals during the period to the quantity of gas in storage at the beginning of the period. This is due to changes in the quantities of native gas included in base gas and/or losses in base gas due to migration from storage reservoirs. Totals may not equal sum of components because of independent rounding. Geographic coverage is the 50 States and the District of Columbia.

Sources: Form EIA-191, "Underground Natural Gas Storage Report," Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition," and STIFS.

Table 11. Underground Natural Gas Storage - Salt Cavern Storage Fields, 1994 - 1999
(Volumes in Billion Cubic Feet)

Year and Month	Natural Gas in Salt Cavern Underground Storage at End of Period			Change in Working Gas from Same Period Previous Year		Storage Activity		
	Base Gas	Working Gas	Total	Volume	Percent	Injections	Withdrawals	Net Withdrawals
1994 Total^c	44	70	113	—	—	142	123	-19
1995 Total^c	60	72	131	2	2.9	194	200	5
1996 Total^c	64	85	149	14	18.8	258	246	-13
1997								
January	65	57	122	-2	-3.1	21	51	30
February	59	49	109	2	4.0	15	23	8
March	65	56	121	18	47.3	22	16	-6
April	65	58	123	1	1.8	22	19	-2
May	65	73	138	10	17.3	27	13	-14
June	66	80	145	8	11.7	22	16	-7
July	65	66	131	-6	-7.5	15	30	15
August	65	67	132	-11	-12.4	23	22	0
September	65	78	143	-9	-8.7	27	14	-12
October	66	93	159	4	5.6	30	14	-16
November	67	95	162	7	9.4	25	24	-2
December	67	83	150	-4	-3.0	19	31	12
Total	67	83	150	-4	-3.0	267	274	6
1998								
January	67	69	136	10	21.6	18	31	13
February	66	69	135	18	39.1	18	21	3
March	68	64	131	8	13.8	23	29	6
April	68	80	149	22	38.7	30	12	-18
May	68	83	151	9	12.9	26	23	-3
June	66	83	149	3	4.1	21	23	2
July	66	91	157	25	38.0	26	18	-8
August	66	92	158	25	38.8	24	22	-2
September	67	83	151	5	7.4	24	33	9
October	67	116	183	22	24.4	45	12	-33
November	68	119	186	23	24.5	23	18	-5
December	67	104	171	21	26.0	18	33	15
Total	—	—	—	—	—	297	275	-22
1999								
January	69	84	153	14	19.6	19	41	22
February	67	77	144	10	14.3	15	20	5
March	67	68	135	4	6.0	18	26	8
April	67	77	144	-3	-3.8	27	18	-9
May	67	94	161	11	13.4	29	12	-17
June	65	102	167	19	22.6	21	15	-6
July	65	94	160	3	3.0	16	24	8
August	66	102	168	9	9.6	22	14	-8
September	66	113	179	29	35.0	23	13	-10
October	67	114	181	-1	-1.2	21	19	-1
November	67	122	189	4	3.4	21	17	-4
December	67	100	167	-4	-4.1	18	33	15
Total	—	—	—	—	—	249	253	4

^c Total as of December 31.

— Not Applicable.

Notes: Data for 1994 through 1998 are final. All other data are preliminary unless otherwise noted. See Explanatory Note 7 of the *Natural Gas Monthly* for discussion of the reporting of underground storage information. Gas in storage at the end of a reporting period may not equal the quantity derived by adding or subtracting net injections or withdrawals during the period to the quantity of gas in storage at the beginning of the period. This is due to changes in the quantities of native gas included in base gas and/or losses in

base gas due to migration from storage reservoirs. Totals may not equal sum of components because of independent rounding. Geographic coverage is the 50 States and the District of Columbia. Positive net withdrawals indicate the volume of withdrawals in excess of injections. Negative net withdrawals indicate the volume of injections in excess of withdrawals.

Sources: Form EIA-191, "Monthly Underground Gas Storage Report," and Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition."

Table 12. Underground Natural Gas Storage - Storage Fields Other than Salt Caverns, 1994-1999

(Volumes in Billion Cubic Feet)

Year and Month	Natural Gas in Non-Salt Cavern Underground Storage at End of Period			Change in Working Gas from Same Period Previous Year		Storage Activity		
	Base Gas	Working Gas	Total	Volume	Percent	Injections	Withdrawals	Net Withdrawals
1994 Total^c	4,317	2,536	6,853	—	—	2,654	2,385	-269
1995 Total^c	4,290	2,082	6,371	-455	-17.9	2,372	2,774	403
1996 Total^c	4,277	2,087	6,364	6	0.3	2,647	2,665	18
1997								
January	4,282	1,439	5,721	34	2.5	47	702	654
February	4,283	1,090	5,372	116	12.0	40	390	350
March	4,280	935	5,215	214	29.8	109	269	160
April	4,277	993	5,270	195	24.6	184	127	-56
May	4,275	1,292	5,566	191	17.6	335	28	-307
June	4,291	1,651	5,942	194	13.3	385	26	-358
July	4,290	1,951	6,241	124	6.8	346	49	-297
August	4,291	2,271	6,563	103	4.7	356	34	-322
September	4,295	2,595	6,890	75	3.0	353	29	-324
October	4,292	2,793	7,085	70	2.6	265	70	-195
November	4,292	2,604	6,896	142	5.8	88	278	191
December	4,283	2,092	6,375	4	0.2	27	548	521
Total	4,283	2,092	6,375	4	0.2	2,533	2,551	18
1998								
January	4,281	1,643	5,923	203	14.2	51	507	456
February	4,276	1,357	5,633	267	24.5	57	344	287
March	4,274	1,119	5,393	184	19.8	113	353	240
April	4,271	1,306	5,576	312	31.5	250	68	-182
May	4,272	1,691	5,963	398	30.9	407	20	-387
June	4,269	2,030	6,300	378	23.0	358	29	-329
July	4,312	2,337	6,649	385	19.8	345	36	-309
August	4,274	2,606	6,880	332	14.7	312	37	-275
September	4,273	2,844	7,118	247	9.6	274	41	-233
October	4,275	3,076	7,350	280	10.1	263	34	-229
November	4,276	3,036	7,313	430	16.6	114	150	36
December	4,259	2,626	6,884	532	25.5	64	485	421
Total	—	—	—	—	—	2,608	2,103	-504
1999								
January	4,257	2,010	6,268	367	22.4	37	638	601
February	4,245	1,714	5,960	363	26.8	47	375	328
March	4,294	1,363	5,657	242	21.6	67	355	289
April	4,288	1,437	5,725	134	10.3	175	94	-81
May	4,279	1,753	6,031	61	3.6	351	31	-320
June	4,279	2,055	6,333	35	1.7	324	24	-300
July	4,285	2,296	6,581	-30	-1.3	287	54	-233
August	4,276	2,530	6,806	-75	-2.9	287	56	-231
September	4,294	2,772	7,066	-73	-2.5	329	29	-300
October	4,293	2,912	7,205	-164	-5.3	217	70	-147
November	4,297	2,869	7,166	-168	-5.5	149	183	34
December	4,306	2,409	6,715	-217	-8.3	36	535	499
Total	—	—	—	—	—	2,306	2,444	138

^c Total as of December 31.

— Not Applicable.

Notes: Data for 1994 through 1998 are final. All other data are preliminary unless otherwise noted. See Explanatory Note 7 of the *Natural Gas Monthly* for discussion of the reporting of underground storage information. Gas in storage at the end of a reporting period may not equal the quantity derived by adding or subtracting net injections or withdrawals during the period to the quantity of gas in storage at the beginning of the period. This is due to changes in the quantities of native gas included in base gas and/or losses in

base gas due to migration from storage reservoirs. Totals may not equal sum of components because of independent rounding. Geographic coverage is the 50 States and the District of Columbia. Positive net withdrawals indicate the volume of withdrawals in excess of injections. Negative net withdrawals indicate the volume of injections in excess of withdrawals.

Sources: Form EIA-191, "Monthly Underground Gas Storage Report," and Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition."

Table 13. Net Withdrawals from Underground Storage, by State, 1997-1999

(Volumes in Million Cubic Feet)

State	1999						
	Total	December	November	October	September	August	July
Alabama	-164	189	-134	77	-402	-81	-235
Arkansas	233	1,276	423	-219	-237	-901	-1,116
California	-1,134	23,168	-4,713	-4,840	-9,773	2,919	-11,199
Colorado	-1,151	5,102	-875	-2,419	-4,873	-5,436	-6,692
Illinois	-492	38,144	2,249	-28,933	-38,601	-30,924	-23,880
Indiana	187	4,137	-2,154	-3,753	-4,225	-2,797	-1,681
Iowa	846	21,305	1,096	-10,941	-13,108	-12,914	-10,783
Kansas	16,997	22,749	979	-1,014	-14,496	-9,796	-3,006
Kentucky	2,256	10,764	2,283	-1,117	-10,052	-1,241	-3,773
Louisiana	-4,822	31,136	4,760	-12,129	-32,350	-3,569	-3,546
Maryland	-78	1,417	459	-3,376	-1,411	-1,954	1,324
Michigan	33,967	97,764	6,940	-21,286	-45,478	-50,880	-51,556
Minnesota	-253	147	-128	-175	-272	-250	-308
Mississippi	14,304	8,997	-2,641	1,133	-2,086	-1,088	852
Missouri	-557	341	-174	-205	-408	-64	6
Montana	8,194	2,673	1,189	519	-1,472	-2,542	-1,794
Nebraska	-294	491	-298	-477	-1,732	-1,004	478
New Mexico	-2,293	814	-1,202	-260	-2,232	-841	-172
New York	8,773	12,598	1,472	-938	-5,725	-6,853	-5,915
Ohio	15,699	43,488	8,486	-9,284	-25,111	-27,587	-27,798
Oklahoma	-10,508	15,213	-2,795	-11,483	-15,540	-1,222	-748
Oregon	-409	1,381	-592	0	-1,542	-1,313	-2,114
Pennsylvania	20,463	68,921	4,194	-19,002	-41,487	-37,841	-27,925
Tennessee	-28	164	56	-57	-105	-104	-76
Texas	387	38,053	-770	-11,096	-10,532	-7,923	-6,519
Utah	9,193	12,584	957	-1,889	-4,860	-4,582	-7,489
Virginia	129	467	182	-110	-418	-207	-209
Washington	-2,543	1,684	-38	-1,402	-402	-2,951	-3,595
West Virginia	35,234	46,582	10,697	-3,299	-20,378	-22,999	-23,517
Wyoming	-995	2,378	545	-306	-1,030	-1,371	-2,294
AGA Regions							
Producing	14,300	118,238	-1,246	-35,067	-77,473	-25,340	-14,255
Eastern Consuming	115,941	346,773	35,355	-102,700	-208,641	-197,450	-175,542
Western Consuming	10,902	49,118	-3,655	-10,511	-24,223	-15,526	-35,485
Total	141,142	514,128	30,454	-148,279	-310,337	-238,316	-225,282

See footnotes at end of table.

Table 13. Net Withdrawals from Underground Storage, by State, 1997-1999

(Volumes in Million Cubic Feet) — Continued

State	1999						1998
	June	May	April	March	February	January	Total
Alabama	-210	-471	-137	312	114	813	-447
Arkansas	-1,086	-1,045	-667	690	1,049	2,066	-1,774
California	-20,737	-27,111	-911	9,782	18,491	23,789	-40,969
Colorado	-5,526	-307	8,881	3,319	3,684	3,990	-5,072
Illinois	-24,188	-27,851	7,599	27,580	41,907	56,407	-9,780
Indiana	-1,625	-758	921	3,622	2,942	5,558	-921
Iowa	-6,837	-4,596	86	5,170	11,814	20,553	-2,954
Kansas	-17,080	-12,144	5,085	13,977	9,273	22,470	-18,691
Kentucky	-10,131	-8,328	-2,297	6,081	7,825	12,241	-11,700
Louisiana	-19,988	-22,324	-16,632	10,263	15,966	43,591	-82,860
Maryland	93	-2,551	-667	1,208	1,982	3,399	-876
Michigan	-51,441	-49,536	-23,148	53,123	57,189	112,276	-74,840
Minnesota	-172	0	214	167	238	287	372
Mississippi	-3,642	-5,105	-2,240	6,840	3,303	9,981	-10,185
Missouri	6	-697	-27	150	343	170	173
Montana	-1,784	-568	1,329	2,410	3,375	4,860	-400
Nebraska	-697	-701	1,168	1,338	442	698	1,466
New Mexico	-443	-1,371	1,025	943	83	1,364	-6,479
New York	-6,909	-9,935	-5,300	10,688	10,057	15,534	-10,656
Ohio	-27,954	-33,732	-5,317	33,698	33,362	53,448	-26,672
Oklahoma	-9,556	-14,068	-8,791	8,079	-881	31,284	-48,008
Oregon	-2,013	168	735	1,185	1,717	1,979	-1,278
Pennsylvania	-36,090	-44,102	-24,525	44,023	50,445	83,851	-40,009
Tennessee	-107	-143	3	80	131	130	-62
Texas	-21,602	-30,819	-15,510	14,152	9,654	43,297	-102,117
Utah	-5,915	-3,772	1,667	5,738	6,185	10,569	676
Virginia	-211	-273	-184	325	449	317	-510
Washington	-1,765	-786	1,852	1,113	3,144	603	-539
West Virginia	-26,426	-32,000	-13,958	30,271	36,278	53,983	-28,267
Wyoming	-1,661	-2,132	-990	352	2,050	3,464	-2,719
AGA Regions							
Producing	-73,397	-86,875	-37,730	54,944	38,447	154,055	-270,114
Eastern Consuming	-192,727	-215,674	-65,782	217,668	255,282	419,379	-206,056
Western Consuming	-39,575	-34,509	12,778	24,066	38,885	49,540	-49,929
Total	-305,699	-337,059	-90,735	296,678	332,615	622,974	-526,099

See footnotes at end of table.

Table 13. Net Withdrawals from Underground Storage, by State, 1997-1999

(Volumes in Million Cubic Feet) — Continued

State	1998						
	December	November	October	September	August	July	June
Alabama	139	-1	-613	401	-200	9	-623
Arkansas	1,245	63	-580	-817	-1,005	-1,034	-1,100
California	30,486	-14,022	-23,861	-5,931	-7,171	-9,351	-27,432
Colorado	7,324	-1,757	-2,045	-5,894	-5,866	-4,055	-3,907
Illinois	42,407	9,311	-30,361	-39,382	-32,631	-25,975	-32,534
Indiana	4,063	-2,296	-2,901	-4,532	-4,058	-2,987	-519
Iowa	20,920	-178	-7,251	-12,282	-10,097	-14,097	-8,440
Kansas	14,533	3,580	-8,545	-9,036	-11,957	-12,830	-6,032
Kentucky	10,352	1,731	-5,424	-4,214	-7,859	-11,061	-8,191
Louisiana	38,463	1,355	-36,341	-9,007	-20,195	-25,554	-14,745
Maryland	1,882	29	-1,312	-809	-1,413	-2,954	-1,266
Michigan	60,982	18,759	-27,000	-30,308	-52,147	-60,115	-69,950
Minnesota	438	-84	-187	-275	-284	-289	-169
Mississippi	5,464	702	-10,304	268	-4,119	-6,008	-2,924
Missouri	573	-204	-208	-414	-203	8	143
Montana	3,962	2,606	-1,532	-4,239	-4,524	-2,294	-2,024
Nebraska	1,336	625	-308	-778	-524	-727	-422
New Mexico	-619	-1,243	-1,903	-470	-919	-429	-180
New York	6,889	1,047	-4,424	-5,650	-5,731	-7,931	-8,569
Ohio	35,491	7,882	-12,789	-19,356	-27,403	-31,408	-26,039
Oklahoma	24,711	106	-19,358	-12,262	-7,283	-7,570	-12,648
Oregon	1,329	49	9	-1,141	-1,143	-1,188	-1,968
Pennsylvania	46,685	858	-20,516	-28,003	-19,997	-33,256	-39,947
Tennessee	131	-2	-103	-102	-112	-134	0
Texas	36,724	-2,512	-34,274	-4,692	-12,193	-20,397	-20,094
Utah	6,533	2,087	-1,821	-3,970	-3,554	-3,497	-3,938
Virginia	371	47	-204	-244	-322	-185	-296
Washington	3,223	-732	718	-1,825	-3,645	-313	-2,967
West Virginia	27,238	3,983	-6,935	-16,431	-29,122	-28,626	-26,455
Wyoming	2,677	-590	-1,425	-2,614	-2,007	-2,807	-3,398
AGA Regions							
Producing	120,522	2,052	-111,305	-36,017	-57,671	-73,822	-57,723
Eastern Consuming	259,459	41,592	-120,349	-162,103	-191,819	-219,439	-223,109
Western Consuming	55,973	-12,444	-30,145	-25,888	-28,194	-23,795	-45,804
Total	435,953	31,200	-261,799	-224,007	-277,684	-317,056	-326,636

See footnotes at end of table.

Table 13. Net Withdrawals from Underground Storage, by State, 1997-1999

(Volumes in Million Cubic Feet) — Continued

State	1998					1997	
	May	April	March	February	January	Total	December
Alabama	-144	-245	248	187	396	-162	243
Arkansas	-1,046	-471	1,039	875	1,057	250	1,526
California	-29,142	-10,607	-2,021	27,350	30,733	16,340	58,418
Colorado	-6,024	3,583	3,844	6,255	3,470	-525	5,026
Illinois	-25,812	-559	28,954	37,109	59,692	-10,153	44,906
Indiana	-483	929	4,371	3,335	4,158	984	4,193
Iowa	-3,579	387	6,794	5,558	19,310	-6,255	17,041
Kansas	-18,906	-6,791	14,242	8,141	14,910	-11,372	12,277
Kentucky	-11,810	-2,512	7,813	9,965	9,510	3,013	10,773
Louisiana	-22,813	-23,161	7,319	264	21,556	-9,248	43,644
Maryland	-816	-1,138	1,464	2,507	2,951	-544	1,298
Michigan	-69,619	-31,658	55,729	46,095	84,391	-3,388	78,027
Minnesota	0	159	416	203	444	-373	4
Mississippi	-3,418	-3,682	2,243	4,112	7,481	3,763	8,484
Missouri	-460	48	423	10	458	-453	228
Montana	-2,570	224	3,017	2,554	4,421	11,962	3,169
Nebraska	-773	860	1,261	425	490	-1,590	944
New Mexico	-1,120	287	658	-130	-412	2,065	2,500
New York	-11,697	-4,090	8,738	9,298	11,466	304	10,735
Ohio	-36,194	-14,843	28,785	34,200	35,002	-7,336	40,530
Oklahoma	-23,402	-19,472	7,174	715	21,282	-9,482	25,362
Oregon	0	80	923	1,238	534	-1,316	1,036
Pennsylvania	-58,295	-34,442	39,608	49,416	57,879	28,381	53,825
Tennessee	0	0	83	60	116	0	0
Texas	-27,224	-40,175	-8,935	-3,634	35,289	10,035	53,619
Utah	-3,543	267	1,430	5,033	5,649	-7,571	13,169
Virginia	-304	-203	322	444	63	0	0
Washington	-3,938	1,542	3,328	4,131	-62	-1,003	3,159
West Virginia	-26,087	-14,668	23,897	32,869	32,069	16,716	36,318
Wyoming	-1,332	116	2,499	2,092	4,069	908	3,019
AGA Regions							
Producing	-97,929	-93,466	23,740	10,342	101,163	-13,990	147,412
Eastern Consuming	-246,072	-102,134	208,491	231,479	317,949	19,518	299,061
Western Consuming	-46,550	-4,634	13,435	48,858	49,259	18,423	87,001
Total	-390,552	-200,234	245,667	290,679	468,371	23,950	533,474

Notes: This table contains total net withdrawals for each State with natural gas storage facilities. Positive numbers indicate the volume of withdrawals in excess of injections. Negative values indicate the volume of injections in excess of withdrawals. Data through 1998 are final. All other data are preliminary at this time and are not considered final until publication of the *Natural Gas Annual* for that year. The American Gas Association (AGA) publishes weekly estimates of working gas levels in underground storage by

region. AGA defines the Producing Region as Texas, Oklahoma, Kansas, New Mexico, Louisiana, Arkansas, and Mississippi; the Eastern Consuming Region as all States east of the Mississippi River less Mississippi, plus Iowa, Nebraska and Missouri; the Western Consuming Region as all States west of the Mississippi River less the Producing Region and Iowa, Nebraska and Missouri.

Source: Form EIA-191, "Monthly Underground Gas Storage Report."

**Table 14. Activities of Underground Natural Gas Storage Operators, by State,
December 1999**

(Volumes in Million Cubic Feet)

State	Total Storage Capacity	Natural Gas in Underground Storage at End of Period			Change in Working Gas from Same Period Previous Year		Storage Activity	
		Base Gas	Working Gas	Total	Volume	Percent	Injections	Withdrawals
Alabama	3,280	1,190	1,779	2,969	164	10.2	67	256
Arkansas	24,191	8,715	7,346	16,061	-149	-2.0	17	1,293
California	388,370	246,825	168,993	415,817	-868	-0.5	1,621	24,789
Colorado	99,600	48,229	36,075	84,304	1,126	3.2	970	6,072
Illinois	898,565	671,848	194,767	866,615	-21,835	-10.1	4,266	42,410
Indiana	113,210	73,876	31,389	105,264	-142	-0.5	151	4,288
Iowa	273,200	200,700	42,768	243,468	-2,474	-5.5	1,038	22,343
Kansas	301,102	179,362	77,084	256,446	-16,521	-17.6	2,230	24,979
Kentucky	219,908	109,117	90,730	199,847	-2,385	-2.6	1,082	11,845
Louisiana	563,868	266,495	218,075	484,571	-5,094	-2.3	10,348	41,483
Maryland	62,000	46,677	12,918	59,595	78	0.6	637	2,053
Michigan	1,021,675	465,923	459,878	925,800	-59,041	-11.4	1,746	99,510
Minnesota	7,000	4,623	2,183	6,806	253	13.1	0	147
Mississippi	134,012	76,864	37,750	114,614	-13,395	-26.2	1,840	10,837
Missouri	31,274	21,600	9,829	31,429	557	6.0	0	341
Montana	371,510	167,353	38,296	205,649	-8,231	-17.7	724	3,398
Nebraska	39,469	31,507	3,692	35,199	473	14.7	203	694
New Mexico	96,600	29,920	9,197	39,117	-61	-0.7	1,078	1,892
New York	175,129	103,063	55,936	158,999	-15,112	-21.3	968	13,566
Ohio	575,384	352,028	138,889	490,917	-14,990	-9.7	780	44,268
Oklahoma	394,827	217,527	139,288	356,815	10,696	8.3	2,720	17,933
Oregon	11,623	6,834	7,673	14,507	516	7.2	0	1,381
Pennsylvania	684,842	353,975	291,952	645,927	-30,067	-9.3	6,370	75,291
Tennessee	1,200	340	855	1,195	68	8.6	0	164
Texas	684,226	250,584	242,889	493,473	-12,085	-4.7	12,740	50,793
Utah	121,980	64,601	29,734	94,335	-8,327	-21.9	143	12,727
Virginia	4,669	2,410	1,708	4,118	-189	-10.0	127	594
Washington	37,300	19,000	15,508	34,508	4,310	38.5	1,013	2,697
West Virginia	733,158	290,641	119,257	409,898	-29,319	-19.7	689	47,272
Wyoming	105,869	60,782	22,284	83,066	1,060	5.0	124	2,502
AGA Regions								
Producing	2,198,826	1,029,467	731,629	1,761,096	-36,610	-4.8	30,973	149,211
Eastern Consuming	4,836,962	2,724,896	1,456,345	4,181,241	-174,214	-10.7	18,123	364,895
Western Consuming	1,143,251	618,247	320,746	938,993	-10,160	-3.1	4,596	53,713
Total	8,179,039	4,372,610	2,508,720	6,881,330	-220,984	-8.1	53,692	567,819

Notes: Gas in storage at the end of a reporting period may not equal the quantity derived by adding or subtracting net injections or withdrawals during the period to the quantity of gas in storage at the beginning of the period. This is due to changes in the quantities of native gas included in base gas and/or losses in base gas due to migration from storage reservoirs. Totals may not equal sum of components because of independent rounding. Geographic coverage is the 50 States and the District of Columbia. The American Gas Association (AGA) publishes weekly estimates of working

gas levels in underground storage by region. AGA defines the Producing Region as Texas, Oklahoma, Kansas, New Mexico, Louisiana, Arkansas, and Mississippi; the Eastern Consuming Region as all States east of the Mississippi River less Mississippi, plus Iowa, Nebraska and Missouri; the Western Consuming Region as all States west of the Mississippi River less the Producing Region and Iowa, Nebraska and Missouri.

Source: Form EIA-191, "Monthly Underground Gas Storage Report."

Table 15. Natural Gas Deliveries to Residential Consumers, by State, 1997-1999
(Million Cubic Feet)

State	YTD 1999	YTD 1998	YTD 1997	1999		
				November	October	September
Alabama	37,711	42,096	40,554	3,137	1,594	1,212
Alaska	15,168	13,434	12,984	2,127	1,423	870
Arizona	28,184	31,435	26,293	1,682	1,165	1,006
Arkansas	NA	33,640	36,058	NA	NA	NA
California	502,695	481,100	410,418	34,480	25,260	24,491
Colorado	NA	96,027	98,120	NA	NA	NA
Connecticut	32,901	30,887	34,585	3,046	1,513	947
Delaware	7,732	6,861	7,759	575	278	169
District of Columbia	NA	11,686	13,386	1,028	483	325
Florida	11,499	12,975	11,280	944	641	611
Georgia	NA	92,349	94,492	NA	NA	NA
Hawaii	482	491	472	36	44	41
Idaho	15,361	13,565	12,868	1,526	867	436
Illinois	371,607	345,822	427,512	38,561	26,429	12,550
Indiana	NA	120,091	143,225	NA	NA	NA
Iowa	60,892	58,387	69,645	5,611	3,470	1,833
Kansas	NA	61,450	59,091	4,233	2,807	1,572
Kentucky	48,787	46,256	54,858	5,456	2,628	1,402
Louisiana	38,829	42,587	44,750	3,249	2,069	1,733
Maine	815	778	867	95	62	29
Maryland	NA	58,833	66,369	6,241	2,490	1,951
Massachusetts	NA	89,696	96,632	NA	NA	NA
Michigan	302,029	277,373	329,802	29,664	18,342	7,838
Minnesota	NA	91,810	111,438	NA	7,112	3,367
Mississippi	NA	22,292	23,271	1,650	883	796
Missouri	98,242	96,906	108,584	6,894	4,181	2,748
Montana	16,842	16,241	17,795	1,983	1,342	636
Nebraska	35,294	36,541	41,317	2,727	2,131	792
Nevada	24,505	25,688	21,358	2,008	1,214	958
New Hampshire	5,843	5,528	6,005	563	311	161
New Jersey	NA	171,567	185,791	NA	NA	NA
New Mexico	NA	28,577	28,406	6,327	NA	NA
New York	NA	297,575	327,568	NA	NA	NA
North Carolina	46,136	45,051	43,692	3,954	1,684	1,037
North Dakota	9,431	8,665	9,948	960	662	301
Ohio	NA	253,193	304,190	27,730	17,320	6,865
Oklahoma	54,496	59,008	60,738	3,631	2,219	1,513
Oregon	32,665	28,862	27,838	3,060	1,592	921
Pennsylvania	206,748	188,156	224,786	19,778	11,580	5,776
Rhode Island	14,949	14,578	15,653	1,227	691	445
South Carolina	21,903	22,612	21,058	2,096	737	488
South Dakota	10,138	9,977	11,469	918	607	300
Tennessee	NA	51,343	52,619	4,257	1,936	1,526
Texas	146,018	171,152	197,578	10,810	6,857	5,848
Utah	45,860	46,997	47,732	5,321	3,567	2,285
Vermont	2,289	2,166	2,285	214	124	59
Virginia	NA	54,120	61,778	5,707	2,928	1,488
Washington	NA	53,947	50,407	NA	NA	NA
West Virginia	NA	25,690	29,979	NA	1,349	688
Wisconsin	106,120	97,237	116,774	11,462	7,988	3,442
Wyoming	10,541	11,066	10,663	994	746	508
Total	4,015,295	3,904,363	4,252,742	359,081	225,077	136,170

See footnotes at end of table.

Table 15. Natural Gas Deliveries to Residential Consumers, by State, 1997-1999

(Million Cubic Feet) — Continued

State	1999					
	August	July	June	May	April	March
Alabama	1,151	1,287	1,387	1,914	3,979	6,535
Alaska	481	486	559	939	1,315	2,075
Arizona	963	1,065	1,352	2,109	3,319	3,694
Arkansas	952	998	1,030	1,641	3,732	5,157
California	23,371	25,721	32,952	40,596	62,112	67,403
Colorado	NA	NA	4,769	9,761	10,816	13,735
Connecticut	853	946	1,128	1,879	3,623	5,780
Delaware	168	201	254	497	989	1,574
District of Columbia	315	NA	399	687	1,269	2,324
Florida	605	647	712	841	1,217	1,651
Georgia	NA	2,246	1,525	NA	4,937	11,239
Hawaii	41	45	43	44	46	44
Idaho	359	428	645	1,244	1,875	2,257
Illinois	9,093	9,972	11,127	15,873	31,264	61,443
Indiana	3,329	3,672	5,062	NA	NA	NA
Iowa	1,233	1,825	1,597	3,082	5,544	9,861
Kansas	1,696	1,556	2,170	3,603	6,284	NA
Kentucky	1,190	1,174	1,336	1,806	4,113	9,268
Louisiana	1,649	1,761	1,908	2,264	3,754	5,450
Maine	25	22	31	45	76	131
Maryland	1,733	NA	2,172	NA	6,125	NA
Massachusetts	NA	NA	NA	NA	NA	NA
Michigan	6,432	6,908	10,413	16,098	31,611	53,870
Minnesota	2,523	2,243	3,103	4,967	8,560	15,337
Mississippi	690	784	813	1,063	NA	^R 3,299
Missouri	2,296	2,557	3,089	5,321	9,692	16,624
Montana	378	518	645	1,380	1,894	2,114
Nebraska	1,118	1,003	1,180	^R 2,351	3,735	5,726
Nevada	926	945	1,240	1,853	2,718	3,349
New Hampshire	142	153	195	371	672	991
New Jersey	NA	NA	NA	NA	NA	NA
New Mexico	NA	822	922	1,163	2,876	6,499
New York	NA	NA	NA	NA	NA	NA
North Carolina	924	1,118	1,316	2,605	5,341	9,456
North Dakota	197	232	266	627	984	1,318
Ohio	NA	6,624	7,972	12,577	26,862	51,348
Oklahoma	1,444	1,657	1,923	3,079	6,228	8,399
Oregon	811	839	1,635	2,754	3,888	5,047
Pennsylvania	4,808	5,112	6,518	11,260	21,700	37,498
Rhode Island	399	531	557	949	1,702	2,704
South Carolina	448	492	570	1,195	2,226	4,375
South Dakota	224	274	324	629	1,140	1,486
Tennessee	1,162	1,066	1,422	NA	NA	7,650
Texas	5,300	5,982	6,729	8,323	14,678	18,993
Utah	1,484	2,254	1,648	2,663	5,267	5,425
Vermont	57	56	77	159	284	377
Virginia	1,404	1,524	1,605	NA	5,135	11,359
Washington	NA	NA	NA	NA	NA	NA
West Virginia	NA	533	NA	NA	NA	NA
Wisconsin	2,821	2,675	3,272	5,018	9,062	16,429
Wyoming	251	310	497	1,095	1,225	1,313
Total	117,765	128,562	155,137	^R234,185	416,530	^R660,029

See footnotes at end of table.

Table 15. Natural Gas Deliveries to Residential Consumers, by State, 1997-1999

(Million Cubic Feet) — Continued

State	1999		1998			
	February	January	Total	December	November	October
Alabama	6,297	9,218	46,544	4,447	2,468	1,320
Alaska	2,223	2,668	15,617	2,183	1,858	1,346
Arizona	5,415	6,411	36,100	4,666	2,008	1,136
Arkansas	5,260	9,049	38,190	4,550	2,668	1,109
California	77,973	88,334	549,931	68,831	40,200	26,159
Colorado	15,467	21,300	110,839	14,812	8,806	4,366
Connecticut	6,082	7,104	35,329	4,442	3,224	1,518
Delaware	1,469	1,560	7,755	895	571	231
District of Columbia	2,309	2,915	13,249	1,563	1,088	459
Florida	1,500	2,130	14,102	1,127	842	685
Georgia	13,564	17,037	107,398	15,049	9,441	4,325
Hawaii	48	49	535	44	40	39
Idaho	2,633	3,090	16,002	2,438	1,510	657
Illinois	61,466	93,829	409,812	63,990	43,853	21,536
Indiana	NA	32,227	140,122	20,031	13,541	6,497
Iowa	10,655	16,180	68,901	10,514	6,345	3,030
Kansas	NA	NA	70,217	8,767	5,820	2,322
Kentucky	8,782	11,632	55,545	9,289	6,112	2,220
Louisiana	5,871	9,121	47,574	4,987	2,703	1,785
Maine	133	165	910	132	95	62
Maryland	NA	14,660	68,057	9,224	6,485	2,863
Massachusetts	17,836	12,570	102,062	12,366	9,367	4,301
Michigan	52,118	68,735	319,701	42,328	29,671	15,956
Minnesota	17,086	25,409	110,449	18,639	12,193	5,319
Mississippi	3,016	5,463	24,847	2,556	1,524	805
Missouri	18,572	26,270	110,779	13,873	8,099	3,355
Montana	2,494	3,457	19,172	2,931	2,069	1,266
Nebraska	5,954	8,576	40,771	4,230	3,386	1,623
Nevada	4,332	4,962	30,023	4,335	2,526	1,367
New Hampshire	1,036	1,246	6,267	739	566	294
New Jersey	NA	NA	196,658	25,091	17,413	8,720
New Mexico	4,912	9,831	35,877	7,299	3,552	1,171
New York	NA	NA	339,512	41,937	30,010	15,308
North Carolina	7,485	11,215	50,786	5,735	4,062	1,217
North Dakota	1,565	2,320	10,092	1,427	1,016	475
Ohio	49,202	59,175	296,576	43,384	30,086	16,290
Oklahoma	9,446	14,958	66,521	7,513	4,245	1,743
Oregon	5,783	6,336	34,417	5,555	3,180	1,445
Pennsylvania	36,752	45,967	217,929	29,772	21,159	10,204
Rhode Island	2,662	3,083	16,461	1,883	1,408	645
South Carolina	3,588	5,687	25,430	2,818	1,726	575
South Dakota	1,719	2,516	11,646	1,669	1,157	533
Tennessee	8,927	14,795	59,386	8,043	4,397	1,447
Texas	22,662	39,835	199,454	28,302	12,931	7,323
Utah	7,725	8,220	56,843	9,846	5,820	4,472
Vermont	387	496	2,454	289	213	102
Virginia	11,272	13,064	63,186	9,067	6,203	2,499
Washington	NA	NA	61,936	7,989	4,731	2,427
West Virginia	4,946	6,230	29,664	3,974	2,791	1,300
Wisconsin	17,018	26,931	115,946	18,710	11,701	6,381
Wyoming	1,674	1,929	12,702	1,636	1,214	773
Total	680,078	902,680	4,520,276	615,913	398,094	202,996

See footnotes at end of table.

Table 15. Natural Gas Deliveries to Residential Consumers, by State, 1997-1999

(Million Cubic Feet) — Continued

State	1998					
	September	August	July	June	May	April
Alabama	1,196	1,183	1,212	1,394	2,354	4,584
Alaska	818	648	479	628	933	1,239
Arizona	940	902	1,070	1,385	2,107	3,722
Arkansas	861	872	963	1,006	1,725	3,926
California	22,038	21,625	25,149	33,208	38,119	54,074
Colorado	2,806	2,541	3,454	1,664	7,886	11,619
Connecticut	927	839	1,017	1,183	1,858	3,600
Delaware	176	164	196	250	446	840
District of Columbia	340	328	372	436	638	1,198
Florida	657	649	705	779	920	1,509
Georgia	2,889	2,850	2,981	3,210	3,577	8,076
Hawaii	41	40	45	47	41	49
Idaho	316	292	403	667	906	1,563
Illinois	10,506	10,434	9,488	11,525	14,764	32,946
Indiana	3,221	2,803	2,817	3,739	5,390	12,074
Iowa	1,435	1,445	1,596	1,436	2,808	5,824
Kansas	1,479	1,546	1,746	2,092	3,604	7,007
Kentucky	1,150	1,081	1,293	1,295	1,955	3,926
Louisiana	1,719	1,588	1,774	1,815	2,464	4,059
Maine	27	25	22	31	45	71
Maryland	1,882	1,904	1,874	2,139	3,047	5,778
Massachusetts	2,588	2,370	2,848	3,827	5,550	10,361
Michigan	7,580	6,782	7,330	9,848	13,991	31,983
Minnesota	2,678	2,461	2,540	2,765	3,735	7,122
Mississippi	725	718	729	812	1,253	2,283
Missouri	2,627	2,192	2,643	3,141	5,002	10,481
Montana	477	471	499	669	865	1,672
Nebraska	883	1,030	1,011	1,202	1,968	4,339
Nevada	824	813	977	1,487	1,884	2,826
New Hampshire	159	156	169	220	355	643
New Jersey	5,100	4,945	5,345	6,164	12,559	18,824
New Mexico	841	846	828	286	1,279	2,609
New York	9,546	8,900	15,342	12,205	18,810	32,412
North Carolina	973	914	1,058	1,207	2,272	5,083
North Dakota	198	204	230	286	480	935
Ohio	6,390	7,314	8,085	8,568	11,640	25,083
Oklahoma	1,449	1,409	1,624	1,889	3,326	6,412
Oregon	767	668	944	1,684	2,174	2,900
Pennsylvania	5,161	5,058	5,332	6,834	9,648	19,457
Rhode Island	436	438	462	622	1,001	1,662
South Carolina	471	446	461	543	1,067	2,457
South Dakota	248	227	274	304	508	1,127
Tennessee	1,159	1,093	1,164	1,397	2,586	4,992
Texas	5,893	5,774	6,039	6,086	9,090	15,365
Utah	1,916	1,335	1,266	1,962	2,248	4,863
Vermont	114	57	56	77	118	266
Virginia	1,467	1,075	1,435	1,747	2,525	4,741
Washington	1,667	1,574	1,765	2,312	3,221	5,827
West Virginia	623	526	513	670	1,278	2,879
Wisconsin	2,723	2,768	2,421	3,444	4,075	9,186
Wyoming	310	307	345	523	735	1,278
Total	121,417	116,631	132,390	152,708	220,830	407,752

^R Revised Data.^{NA} Not Available.

Notes: Geographic coverage is the 50 States and the District of Columbia.
See Appendix A, Explanatory Note 5 for discussion of computations and

revision policy.

Source: Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers."

Table 16. Natural Gas Deliveries to Commercial Consumers, by State, 1997-1999
(Million Cubic Feet)

State	YTD 1999	YTD 1998	YTD 1997	1999		
				November	October	September
Alabama	25,515	23,290	28,614	2,598	2,176	1,711
Alaska	23,690	23,706	23,761	2,998	2,185	1,520
Arizona	27,795	28,400	26,617	2,220	1,910	1,809
Arkansas	NA	24,893	25,450	NA	NA	NA
California	240,615	250,615	225,078	18,795	15,657	16,411
Colorado	NA	55,700	59,346	NA	NA	NA
Connecticut	41,270	37,346	36,775	3,890	2,641	1,774
Delaware	5,395	4,961	5,761	388	305	179
District of Columbia	NA	15,381	15,633	1,301	896	862
Florida	31,761	34,339	32,923	2,920	^R 2,344	2,147
Georgia	NA	49,889	49,186	NA	NA	NA
Hawaii	1,602	1,595	1,586	145	144	144
Idaho	10,955	10,037	9,746	1,029	676	459
Illinois	160,917	149,960	175,756	15,072	11,908	6,919
Indiana	NA	63,559	71,011	NA	NA	NA
Iowa	38,413	37,022	42,981	3,271	2,575	1,626
Kansas	NA	37,197	35,919	2,480	1,934	1,792
Kentucky	30,944	27,750	32,469	2,931	1,860	1,189
Louisiana	21,985	21,818	22,527	1,939	1,628	1,374
Maine	2,202	2,120	2,338	247	165	78
Maryland	NA	50,937	43,214	4,901	^R 3,672	3,063
Massachusetts	NA	83,458	94,286	NA	NA	NA
Michigan	152,629	142,697	166,365	14,306	9,440	5,870
Minnesota	76,483	69,693	79,888	7,993	5,737	3,175
Mississippi	NA	19,283	19,133	1,686	1,079	1,047
Missouri	56,137	54,817	60,248	3,964	2,805	2,423
Montana	10,355	11,027	11,883	1,101	733	426
Nebraska	24,988	24,977	30,399	1,787	1,156	1,067
Nevada	21,019	20,749	19,321	1,768	1,403	1,268
New Hampshire	NA	5,998	6,479	616	384	221
New Jersey	NA	127,886	145,598	NA	NA	NA
New Mexico	NA	23,081	23,118	2,976	NA	NA
New York	NA	300,547	285,641	NA	NA	NA
North Carolina	40,122	32,581	32,513	2,935	2,132	1,842
North Dakota	9,138	8,720	9,527	913	635	338
Ohio	NA	134,700	158,519	14,754	9,003	4,789
Oklahoma	35,152	38,337	38,942	2,622	2,100	1,878
Oregon	25,071	22,367	22,083	2,256	1,486	1,092
Pennsylvania	124,637	114,056	124,309	13,226	8,541	5,168
Rhode Island	10,819	10,139	10,887	1,309	651	454
South Carolina	19,053	17,902	16,921	1,676	1,251	1,144
South Dakota	8,350	7,959	9,107	736	522	301
Tennessee	NA	46,471	47,168	3,988	3,225	2,919
Texas	168,872	149,645	191,996	15,141	11,359	11,568
Utah	25,459	26,021	25,872	2,725	1,873	1,257
Vermont	2,151	2,579	2,648	209	143	81
Virginia	NA	51,097	52,630	5,005	3,541	2,617
Washington	NA	39,967	39,923	NA	NA	NA
West Virginia	NA	22,023	22,522	2,474	1,960	1,410
Wisconsin	75,110	69,513	76,209	7,385	5,823	2,968
Wyoming	NA	8,592	9,667	NA	761	378
Total	2,712,202	2,637,396	2,800,493	251,832	^R187,579	144,298

See footnotes at end of table.

Table 16. Natural Gas Deliveries to Commercial Consumers, by State, 1997-1999

(Million Cubic Feet) — Continued

State	1999					
	August	July	June	May	April	March
Alabama	1,635	1,626	1,628	1,505	2,190	3,240
Alaska	1,311	1,213	1,326	1,759	1,962	3,009
Arizona	1,683	1,846	2,155	2,519	2,994	3,173
Arkansas	1,520	1,303	NA	NA	2,508	3,392
California	20,556	17,100	17,228	21,902	22,672	29,559
Colorado	NA	NA	3,359	5,544	NA	7,598
Connecticut	2,449	2,535	2,591	3,204	3,724	5,831
Delaware	159	182	215	350	637	998
District of Columbia	840	NA	940	1,249	1,976	2,334
Florida	1,965	2,001	2,436	2,793	3,408	3,962
Georgia	NA	1,643	1,712	NA	2,968	5,657
Hawaii	140	144	143	143	147	142
Idaho	420	425	520	852	1,233	1,532
Illinois	6,187	6,218	5,979	8,316	14,051	24,495
Indiana	NA	2,795	NA	NA	NA	NA
Iowa	1,246	1,520	1,406	1,762	3,777	6,196
Kansas	1,958	1,687	1,504	2,018	3,336	NA
Kentucky	1,845	1,014	1,218	1,690	2,570	5,149
Louisiana	1,484	1,416	1,493	1,625	2,087	2,520
Maine	74	75	90	122	199	357
Maryland	3,081	NA	3,186	NA	5,678	NA
Massachusetts	NA	NA	4,936	5,322	9,335	10,580
Michigan	4,984	5,465	6,183	9,050	14,920	25,952
Minnesota	2,956	2,645	2,860	4,058	6,911	11,125
Mississippi	1,063	1,054	1,078	1,204	NA	2,676
Missouri	2,080	3,128	2,471	3,258	5,235	8,535
Montana	346	423	492	734	1,153	1,308
Nebraska	772	1,074	1,123	^R 2,174	2,308	3,484
Nevada	1,804	1,935	1,400	1,703	1,977	2,372
New Hampshire	227	212	266	NA	658	1,026
New Jersey	NA	NA	NA	NA	NA	NA
New Mexico	NA	1,489	1,524	1,970	2,728	3,324
New York	NA	NA	NA	NA	NA	NA
North Carolina	1,595	1,586	1,698	2,221	3,583	9,816
North Dakota	262	279	286	623	909	1,253
Ohio	NA	4,701	5,540	7,871	15,260	24,202
Oklahoma	1,677	1,697	938	2,265	3,813	4,620
Oregon	983	1,128	1,462	2,053	2,699	3,462
Pennsylvania	4,672	4,536	5,041	6,751	12,734	20,162
Rhode Island	334	501	526	650	1,085	1,731
South Carolina	1,073	1,127	1,109	1,343	1,948	3,188
South Dakota	267	313	438	493	914	1,149
Tennessee	2,265	2,287	3,361	2,601	NA	6,378
Texas	12,805	12,486	12,020	12,790	15,844	17,651
Utah	902	1,090	989	1,858	2,920	3,068
Vermont	77	66	91	140	227	334
Virginia	2,671	2,613	2,584	NA	5,242	7,620
Washington	NA	NA	NA	NA	NA	NA
West Virginia	NA	1,235	NA	1,524	2,253	3,496
Wisconsin	3,189	3,056	2,948	3,362	6,980	11,437
Wyoming	229	361	448	844	941	1,070
Total	145,103	140,315	144,172	^R180,017	260,656	383,047

See footnotes at end of table.

Table 16. Natural Gas Deliveries to Commercial Consumers, by State, 1997-1999
(Million Cubic Feet) — Continued

State	1999		1998			
	February	January	Total	December	November	October
Alabama	3,145	4,063	25,707	2,414	1,716	1,248
Alaska	3,088	3,318	27,079	3,372	2,668	2,318
Arizona	3,587	3,899	31,940	3,388	2,352	1,900
Arkansas	3,510	5,524	28,063	3,169	1,999	1,359
California	28,130	32,605	284,885	31,538	26,959	23,016
Colorado	8,919	11,360	63,145	7,432	4,973	3,321
Connecticut	6,038	6,594	42,410	4,986	3,251	2,678
Delaware	944	1,038	5,592	629	448	243
District of Columbia	2,549	2,486	16,866	1,480	1,205	879
Florida	3,747	4,038	37,743	3,320	2,818	2,603
Georgia	5,897	7,205	55,431	5,531	4,094	3,045
Hawaii	158	153	1,747	151	143	132
Idaho	1,734	2,076	11,712	1,640	1,045	577
Illinois	26,217	35,555	174,747	24,727	17,109	9,948
Indiana	12,336	16,862	73,184	9,557	7,058	4,311
Iowa	6,154	8,881	43,028	6,006	4,261	2,402
Kansas	NA	NA	41,788	4,591	3,019	1,588
Kentucky	4,979	6,499	32,468	4,714	3,198	1,601
Louisiana	2,729	3,691	24,049	2,224	1,707	1,352
Maine	341	454	2,456	337	247	165
Maryland	NA	9,013	57,432	6,433	4,928	3,287
Massachusetts	NA	6,662	90,099	6,635	7,440	5,698
Michigan	25,441	31,020	163,400	20,671	15,174	8,608
Minnesota	12,637	16,386	82,377	12,652	8,896	5,356
Mississippi	2,196	NA	21,360	2,075	1,512	1,155
Missouri	9,736	12,503	62,000	7,177	4,415	2,389
Montana	1,542	2,096	12,961	1,925	1,340	845
Nebraska	4,246	5,797	28,911	3,934	2,218	1,036
Nevada	2,486	2,903	23,347	2,565	1,855	1,307
New Hampshire	1,070	1,312	6,808	810	612	371
New Jersey	NA	NA	146,654	18,767	12,883	8,677
New Mexico	3,748	5,051	27,395	4,125	2,233	1,249
New York	NA	NA	335,800	34,796	27,494	20,887
North Carolina	6,322	6,392	36,427	3,847	2,741	1,767
North Dakota	1,558	2,083	10,085	1,362	1,020	547
Ohio	26,668	28,502	157,061	21,929	14,894	6,706
Oklahoma	5,679	7,865	43,910	5,463	2,771	1,644
Oregon	3,897	4,554	26,024	3,619	2,681	1,291
Pennsylvania	21,547	22,259	131,036	16,940	12,808	7,032
Rhode Island	1,686	1,892	11,482	1,338	1,019	628
South Carolina	2,236	2,957	19,829	1,926	1,531	1,156
South Dakota	1,343	1,873	9,265	1,305	913	363
Tennessee	6,629	9,437	52,406	5,924	4,053	2,520
Texas	19,696	27,511	169,613	19,965	14,533	10,107
Utah	4,198	4,580	31,091	4,934	3,202	2,083
Vermont	321	462	2,979	401	276	165
Virginia	8,070	9,051	58,318	7,186	5,334	3,287
Washington	NA	NA	45,673	5,595	3,442	2,102
West Virginia	3,389	3,961	24,991	2,963	2,345	1,579
Wisconsin	11,592	16,370	81,375	11,803	8,411	4,360
Wyoming	1,120	1,352	10,423	1,822	927	493
Total	394,896	480,288	3,004,570	362,095	264,170	173,381

See footnotes at end of table.

Table 16. Natural Gas Deliveries to Commercial Consumers, by State, 1997-1999

(Million Cubic Feet) — Continued

State	1998					
	September	August	July	June	May	April
Alabama	1,091	1,026	1,027	1,122	1,457	2,386
Alaska	1,619	1,414	1,415	1,511	1,976	2,222
Arizona	1,738	1,719	1,899	2,073	2,494	3,011
Arkansas	1,143	1,205	1,277	1,213	1,431	2,544
California	22,759	25,640	23,301	16,352	20,004	20,978
Colorado	2,371	2,166	2,655	3,087	4,320	6,187
Connecticut	2,033	2,171	2,448	2,143	2,115	4,279
Delaware	180	176	191	227	321	558
District of Columbia	833	843	867	909	1,080	1,824
Florida	2,556	2,640	2,618	2,799	3,059	3,615
Georgia	2,584	2,618	2,712	2,718	3,243	4,687
Hawaii	140	155	134	148	140	145
Idaho	386	380	405	535	686	1,072
Illinois	6,521	6,399	5,203	6,242	6,893	15,152
Indiana	2,897	1,984	2,413	2,650	3,206	6,292
Iowa	1,210	1,166	1,353	1,200	1,513	3,593
Kansas	1,323	1,713	1,811	1,619	1,973	3,225
Kentucky	1,089	1,073	996	1,096	1,466	2,423
Louisiana	1,285	1,364	1,290	1,458	1,597	2,147
Maine	78	74	75	90	122	195
Maryland	2,832	3,085	2,933	3,126	3,478	4,897
Massachusetts	2,359	3,606	4,264	5,336	5,846	9,039
Michigan	5,685	5,694	5,197	6,183	8,265	15,595
Minnesota	2,717	2,289	2,003	2,992	3,171	5,531
Mississippi	1,327	1,198	1,265	1,192	1,229	1,645
Missouri	2,192	3,005	2,184	2,450	2,984	5,556
Montana	439	415	424	481	589	1,089
Nebraska	963	862	1,085	869	1,717	2,829
Nevada	1,110	1,071	1,323	1,605	1,898	2,213
New Hampshire	222	229	228	280	376	623
New Jersey	7,010	5,711	5,924	6,478	9,830	11,710
New Mexico	1,090	1,073	1,039	963	1,603	2,384
New York	16,899	22,277	18,694	16,706	20,849	29,457
North Carolina	1,594	1,571	1,437	1,583	1,975	3,222
North Dakota	324	348	280	305	497	935
Ohio	4,995	4,036	5,461	5,162	7,127	13,278
Oklahoma	1,628	1,641	1,585	1,808	2,315	4,249
Oregon	1,023	880	1,030	1,440	1,626	2,096
Pennsylvania	4,507	4,996	4,584	5,005	5,955	11,091
Rhode Island	483	195	496	506	694	1,141
South Carolina	1,065	1,028	1,011	1,058	1,208	1,728
South Dakota	269	262	282	285	538	806
Tennessee	2,390	2,215	2,365	2,503	3,003	4,490
Texas	12,410	11,729	13,215	9,114	10,425	11,880
Utah	1,028	845	847	1,156	1,513	2,755
Vermont	125	100	102	110	116	281
Virginia	2,449	1,857	2,652	2,572	3,547	4,806
Washington	1,869	1,818	1,947	2,291	2,738	4,236
West Virginia	1,237	1,185	1,102	1,146	1,273	2,176
Wisconsin	3,317	3,096	2,893	3,347	3,569	6,609
Wyoming	343	253	371	442	597	936
Total	139,737	144,498	142,313	137,688	169,645	255,821

^R Revised Data.^{NA} Not Available.

Notes: Geographic coverage is the 50 States and the District of Columbia. Gas volumes delivered for use as vehicle fuel are included in the annual

total but not in the monthly components. See Appendix A, Explanatory Note 5 for discussion of computations and revision policy.

Source: Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers."

Table 17. Natural Gas Deliveries to Industrial Consumers, by State, 1997-1999

(Million Cubic Feet)

State	YTD 1999	YTD 1998	YTD 1997	1999		
				November	October	September
Alabama	186,677	183,933	182,382	17,655	17,404	16,497
Alaska	67,574	69,508	66,748	6,876	6,613	4,738
Arizona	24,015	25,552	25,178	1,903	1,910	2,160
Arkansas	NA	134,776	134,675	12,718	12,568	11,997
California	866,046	753,301	672,328	87,915	104,100	98,766
Colorado	NA	78,776	66,743	NA	NA	NA
Connecticut	28,302	29,660	31,127	3,143	2,637	2,283
Delaware	19,624	14,758	13,205	1,787	1,878	1,798
District of Columbia	0	0	0	0	0	0
Florida	130,590	116,517	119,589	11,472	12,236	11,153
Georgia	NA	151,244	161,598	NA	NA	NA
Hawaii	421	0	0	42	39	39
Idaho ^a	30,798	31,669	31,841	2,821	2,941	2,735
Illinois	277,956	274,756	286,880	26,906	24,758	22,294
Indiana	NA	262,620	263,068	NA	NA	NA
Iowa	95,540	96,689	97,210	8,799	8,267	7,486
Kansas	NA	102,412	105,209	6,513	4,188	⁸ 8,069
Kentucky	83,891	84,715	86,468	8,290	7,899	6,954
Louisiana	886,479	834,262	919,528	82,412	83,139	76,490
Maine	2,067	2,093	2,309	219	224	190
Maryland	NA	34,967	52,207	3,163	2,990	2,918
Massachusetts	NA	113,086	99,289	NA	NA	NA
Michigan	257,096	256,838	305,741	26,811	21,628	19,077
Minnesota	95,183	95,288	97,225	8,081	7,735	7,064
Mississippi	NA	71,829	76,407	7,206	6,962	6,310
Missouri	NA	58,880	64,297	6,425	4,991	4,689
Montana	20,764	19,156	16,646	2,039	1,649	1,305
Nebraska	37,047	49,928	39,334	2,490	3,600	4,465
Nevada	30,046	25,659	26,622	2,651	2,826	2,795
New Hampshire	5,484	5,394	5,362	486	571	471
New Jersey	NA	186,168	185,251	NA	NA	NA
New Mexico	NA	22,809	23,524	3,257	NA	NA
New York	NA	234,855	278,838	26,228	22,097	22,229
North Carolina	98,852	97,635	101,470	10,003	6,788	8,712
North Dakota	16,616	18,708	18,703	1,424	1,201	1,295
Ohio	NA	301,628	304,236	28,638	27,088	24,938
Oklahoma	129,611	185,051	190,078	11,324	10,807	10,617
Oregon	NA	93,512	80,652	10,619	9,406	8,301
Pennsylvania	220,545	210,119	216,252	20,585	19,248	18,426
Rhode Island	31,410	38,798	22,293	2,922	2,322	2,535
South Carolina	93,848	93,351	93,654	9,184	9,005	7,996
South Dakota	4,594	5,035	6,322	445	466	305
Tennessee	NA	131,457	125,957	11,791	18,548	14,597
Texas	NA	1,813,750	1,888,439	164,006	105,398	182,830
Utah	37,135	41,662	39,671	3,628	3,582	3,192
Vermont	2,492	1,903	2,099	273	261	183
Virginia	NA	85,234	77,462	5,865	6,033	NA
Washington	NA	121,145	98,884	NA	NA	NA
West Virginia	NA	45,664	52,176	NA	3,458	3,220
Wisconsin	132,212	127,084	140,525	12,721	12,469	10,307
Wyoming	NA	49,617	42,873	NA	NA	NA
Total	7,867,215	7,883,454	8,038,576	756,734	699,844	^R 739,273

See footnotes at end of table.

Table 17. Natural Gas Deliveries to Industrial Consumers, by State, 1997-1999

(Million Cubic Feet) — Continued

State	1999					
	August	July	June	May	April	March
Alabama	16,973	16,525	15,938	15,947	17,042	19,174
Alaska	4,784	6,932	5,923	6,318	6,244	6,717
Arizona	2,276	1,987	1,956	2,390	2,545	2,237
Arkansas	12,415	10,987	NA	11,429	11,732	12,582
California	94,185	82,007	68,105	69,662	61,776	57,968
Colorado	NA	NA	5,605	6,202	7,672	6,272
Connecticut	2,308	2,221	2,055	2,419	2,504	2,790
Delaware	1,670	1,757	1,459	1,789	1,767	1,952
District of Columbia	0	0	0	0	0	0
Florida	12,870	12,478	11,739	11,827	12,512	12,603
Georgia	NA	8,080	7,177	NA	10,118	13,140
Hawaii	41	40	43	35	38	39
Idaho ^a	2,173	2,450	2,528	2,885	3,167	3,214
Illinois	21,598	21,500	21,056	21,281	25,516	29,721
Indiana	20,696	22,039	21,508	NA	NA	NA
Iowa	7,425	7,195	6,980	8,326	10,104	9,569
Kansas	^R 10,994	9,275	7,751	NA	8,130	8,482
Kentucky	6,321	6,402	6,535	7,087	7,610	9,289
Louisiana	78,575	80,375	80,397	84,470	79,888	82,222
Maine	179	153	184	171	161	189
Maryland	2,927	2,508	2,401	NA	2,845	4,068
Massachusetts	NA	NA	NA	8,740	NA	NA
Michigan	18,271	19,911	20,416	22,851	24,820	28,068
Minnesota	9,164	7,598	7,874	7,457	8,485	9,697
Mississippi	6,287	6,669	6,807	7,007	NA	7,375
Missouri	4,815	4,751	4,801	4,615	5,395	5,127
Montana	1,326	1,293	1,694	1,968	2,120	2,174
Nebraska	3,949	5,432	2,700	2,565	1,178	3,098
Nevada	2,745	2,504	2,573	2,811	2,635	2,816
New Hampshire	478	442	457	486	578	505
New Jersey	NA	NA	NA	NA	NA	NA
New Mexico	NA	3,371	3,279	3,606	NA	3,355
New York	NA	NA	NA	NA	NA	NA
North Carolina	10,082	9,288	8,970	8,857	8,867	9,231
North Dakota	1,130	1,155	1,266	1,351	1,479	2,037
Ohio	NA	23,427	23,595	25,248	28,808	32,257
Oklahoma	9,782	9,601	11,576	11,173	13,128	12,486
Oregon	37,974	8,008	7,861	8,216	8,923	NA
Pennsylvania	18,582	17,497	17,687	18,565	20,802	23,245
Rhode Island	2,496	2,969	2,948	3,343	2,996	2,528
South Carolina	7,948	7,342	7,708	8,102	9,910	9,614
South Dakota	437	419	282	347	446	439
Tennessee	13,428	12,826	11,262	12,000	NA	14,017
Texas	142,569	120,019	142,830	NA	136,782	144,116
Utah	3,180	3,200	2,351	3,422	3,809	3,718
Vermont	176	174	157	192	243	301
Virginia	13,726	12,484	11,269	NA	10,632	8,644
Washington	NA	NA	NA	NA	NA	NA
West Virginia	3,367	3,942	NA	3,225	NA	NA
Wisconsin	9,595	9,235	9,243	10,081	12,061	14,729
Wyoming	NA	NA	3,056	2,980	3,622	3,837
Total	^R734,212	661,004	664,280	686,237	681,677	728,377

See footnotes at end of table.

Table 17. Natural Gas Deliveries to Industrial Consumers, by State, 1997-1999

(Million Cubic Feet) — Continued

State	1999		1998			
	February	January	Total	December	November	October
Alabama	16,360	17,161	200,305	16,372	15,972	16,540
Alaska	5,805	6,626	75,947	6,439	6,255	6,289
Arizona	2,291	2,360	28,157	2,605	2,381	2,518
Arkansas	11,561	13,069	147,313	12,537	11,482	11,877
California	71,293	70,270	827,401	74,100	67,304	77,426
Colorado	6,951	4,630	87,238	8,462	6,859	6,020
Connecticut	2,957	2,985	32,498	2,838	2,656	2,647
Delaware	1,878	1,887	16,287	1,529	1,421	1,416
District of Columbia	0	0	0	0	0	0
Florida	10,480	11,219	126,891	10,374	10,704	10,000
Georgia	12,545	12,929	164,501	13,256	13,475	12,265
Hawaii	33	32	373	373	0	0
Idaho ^a	3,081	2,802	34,303	2,635	2,803	2,715
Illinois	29,436	33,890	303,668	28,912	27,909	25,306
Indiana	26,942	NA	290,973	28,353	24,767	24,269
Iowa	9,554	11,836	105,950	9,261	9,761	9,239
Kansas	7,588	NA	111,143	8,731	10,061	9,356
Kentucky	8,179	9,326	93,217	8,502	8,232	7,864
Louisiana	73,872	84,638	922,155	87,893	66,701	77,953
Maine	104	293	2,297	204	222	227
Maryland	3,261	2,727	38,531	3,564	3,041	3,714
Massachusetts	8,643	8,763	125,286	12,200	10,887	10,111
Michigan	26,451	28,793	282,036	25,198	23,921	21,034
Minnesota	11,186	10,841	104,610	9,322	8,941	9,052
Mississippi	6,541	NA	78,640	6,811	6,335	6,353
Missouri	NA	6,562	64,868	5,988	4,728	5,145
Montana	2,554	2,642	21,416	2,260	1,976	1,732
Nebraska	3,330	4,240	53,053	3,124	3,724	3,475
Nevada	2,674	3,016	28,662	3,003	2,747	2,848
New Hampshire	484	526	5,878	484	531	555
New Jersey	NA	NA	204,791	18,623	16,241	15,186
New Mexico	3,047	NA	25,048	2,239	2,108	2,250
New York	NA	NA	251,591	16,736	18,774	16,275
North Carolina	8,052	10,001	106,497	8,862	8,835	8,618
North Dakota	2,844	1,434	20,606	1,898	1,770	1,176
Ohio	31,603	33,159	332,955	31,327	27,938	27,071
Oklahoma	14,323	14,794	198,110	13,058	13,327	18,083
Oregon	8,595	9,403	102,770	9,258	8,889	9,230
Pennsylvania	23,747	22,161	231,362	21,244	19,127	18,138
Rhode Island	2,930	3,421	42,278	3,480	3,666	3,832
South Carolina	8,225	8,813	102,324	8,973	8,931	8,668
South Dakota	463	545	5,607	572	553	322
Tennessee	12,922	13,545	145,773	14,316	12,701	12,852
Texas	159,127	185,739	2,023,278	209,528	187,395	168,879
Utah	3,350	3,703	45,501	3,839	3,546	3,444
Vermont	312	220	2,105	202	181	179
Virginia	7,305	5,437	92,801	7,567	7,937	8,992
Washington	NA	NA	133,106	11,961	12,639	6,931
West Virginia	3,460	3,865	49,807	4,143	3,909	3,927
Wisconsin	14,428	17,342	141,980	14,896	13,275	11,457
Wyoming	NA	4,360	54,259	4,642	4,428	4,172
Total	724,777	790,800	8,686,147	802,693	731,965	717,629

See footnotes at end of table.

Table 17. Natural Gas Deliveries to Industrial Consumers, by State, 1997-1999

(Million Cubic Feet) — Continued

State	1998					
	September	August	July	June	May	April
Alabama	15,244	16,751	16,002	16,576	17,234	16,823
Alaska	5,678	6,864	6,519	6,228	5,832	6,431
Arizona	2,073	2,504	2,302	2,031	2,310	2,275
Arkansas	12,825	12,791	11,978	12,002	12,230	12,253
California	85,852	82,886	73,063	54,921	67,768	60,386
Colorado	5,309	6,839	6,378	6,506	7,336	8,116
Connecticut	2,217	2,479	2,287	2,237	2,560	2,786
Delaware	1,186	1,223	1,100	1,164	1,260	1,354
District of Columbia	0	0	0	0	0	0
Florida	10,654	10,120	10,580	10,668	10,917	10,903
Georgia	9,104	13,568	12,862	14,709	14,119	14,541
Hawaii	0	0	0	0	0	0
Idaho ^a	2,705	2,533	2,623	2,675	2,596	3,051
Illinois	21,621	20,197	20,023	20,511	22,247	26,535
Indiana	23,418	21,679	21,517	21,370	22,528	21,907
Iowa	7,874	8,136	7,603	7,334	7,470	8,888
Kansas	7,352	10,556	11,987	9,829	8,608	8,114
Kentucky	6,815	6,805	6,830	6,844	7,076	7,598
Louisiana	79,775	80,974	78,083	70,377	72,612	74,984
Maine	193	181	155	187	170	183
Maryland	3,104	3,073	3,044	3,030	3,104	3,160
Massachusetts	9,073	10,001	9,545	10,055	8,845	10,925
Michigan	17,171	16,407	16,866	21,068	23,258	25,202
Minnesota	7,632	8,244	7,755	7,895	6,943	8,777
Mississippi	6,054	6,090	5,999	6,139	6,319	6,642
Missouri	4,520	4,621	4,497	4,704	4,724	5,573
Montana	1,496	1,396	1,425	1,595	1,571	1,943
Nebraska	3,341	5,908	8,653	4,434	3,822	3,579
Nevada	1,830	2,751	2,473	2,360	2,476	2,399
New Hampshire	476	498	438	431	473	494
New Jersey	16,072	16,183	15,073	15,090	15,999	16,922
New Mexico	2,150	2,194	2,191	1,952	1,933	1,964
New York	19,142	19,693	20,346	21,141	19,153	22,886
North Carolina	8,125	8,495	7,932	8,315	8,761	8,825
North Dakota	1,709	1,601	1,529	1,802	1,878	1,740
Ohio	23,596	22,907	22,468	23,470	25,447	29,007
Oklahoma	19,908	18,714	17,475	16,899	14,356	15,067
Oregon	8,680	9,122	8,404	7,480	7,296	8,853
Pennsylvania	17,766	17,354	16,933	17,792	17,910	19,952
Rhode Island	3,533	3,403	3,577	3,445	3,746	3,816
South Carolina	8,301	8,229	7,443	8,284	8,494	7,946
South Dakota	414	444	414	306	704	304
Tennessee	10,349	11,495	10,023	10,286	11,432	12,078
Texas	158,949	170,716	179,303	152,107	157,316	153,562
Utah	3,204	3,049	3,434	3,688	3,678	4,494
Vermont	154	135	153	152	164	164
Virginia	7,880	9,398	8,138	8,143	6,310	7,734
Washington	13,051	13,388	11,020	8,350	6,254	13,105
West Virginia	3,714	3,798	3,856	3,932	3,912	4,362
Wisconsin	9,745	9,280	7,600	9,262	9,508	11,720
Wyoming	3,612	3,775	3,937	4,042	5,133	3,966
Total	694,645	719,443	703,835	653,817	675,793	704,289

^a Small volumes of natural gas representing onsystem sales to industrial consumers in Idaho are included in the annual total but not in monthly components.

^R Revised Data.

^{NA} Not Available.

Notes: Geographic coverage is the 50 States and the District of Columbia. See Appendix A, Explanatory Note 5 for discussion of computations and revision policy.

Source: Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers."

Table 18. Natural Gas Deliveries to Electric Utility^a Consumers, by State, 1997-1999
(Million Cubic Feet)

State	YTD 1999	YTD 1998	YTD 1997	1999		
				November	October	September
Alabama	20,212	24,758	9,909	887	556	1,860
Alaska	26,982	25,826	30,497	2,824	2,618	2,203
Arizona	47,492	34,936	22,633	3,315	6,390	4,690
Arkansas	37,914	40,209	24,511	2,034	1,580	3,096
California	161,033	253,414	351,672	7,473	14,528	9,478
Colorado	13,400	9,709	5,086	290	476	244
Connecticut	12,529	10,596	16,207	1,159	1,318	1,657
Delaware	19,343	10,224	15,392	336	1,349	1,566
District of Columbia	0	0	0	0	0	0
Florida	295,193	263,679	275,412	25,410	32,277	34,297
Georgia	20,328	22,111	7,294	456	691	1,928
Hawaii	0	0	0	0	0	0
Idaho	0	0	0	0	0	0
Illinois	39,234	54,868	39,589	1,778	1,546	1,705
Indiana	7,287	8,859	4,524	154	139	307
Iowa	5,230	5,803	3,916	328	317	449
Kansas	35,283	35,217	23,832	747	1,141	1,972
Kentucky	5,538	5,624	2,036	262	188	462
Louisiana	300,693	300,050	260,657	16,577	21,198	32,192
Maine	0	0	0	0	0	0
Maryland	16,080	11,805	10,798	348	1,346	1,107
Massachusetts	8,715	17,702	49,079	401	366	833
Michigan	48,068	44,872	30,259	3,199	3,869	3,700
Minnesota	5,950	7,618	5,987	234	98	192
Mississippi	92,445	72,236	68,511	5,707	6,711	7,503
Missouri	16,126	15,520	7,155	387	446	983
Montana	278	486	399	14	7	8
Nebraska	4,638	4,938	2,622	104	138	242
Nevada	58,947	55,576	48,130	4,557	5,611	6,435
New Hampshire	438	149	530	22	0	161
New Jersey	31,532	30,204	28,982	1,104	1,277	3,182
New Mexico	32,554	36,158	31,377	2,161	3,019	3,360
New York	172,194	197,437	203,217	11,209	11,945	14,068
North Carolina	9,414	12,382	4,509	45	93	556
North Dakota	0	0	1	0	0	0
Ohio	11,066	7,313	3,364	186	354	561
Oklahoma	161,095	161,511	117,417	8,221	10,822	13,971
Oregon	20,883	25,874	8,763	2,964	4,549	3,112
Pennsylvania	9,920	6,533	7,006	264	452	565
Rhode Island	0	15,589	24,558	0	0	0
South Carolina	5,062	5,851	2,696	76	17	165
South Dakota	2,427	2,677	1,648	23	69	79
Tennessee	3,425	6,213	1,636	32	0	174
Texas	1,143,923	1,170,709	986,984	63,416	97,302	117,454
Utah	5,152	5,452	3,902	345	969	428
Vermont	246	184	32	3	1	90
Virginia	22,312	19,630	10,721	927	650	1,698
Washington	6,430	12,717	2,430	467	3,026	1,273
West Virginia	343	392	207	37	46	23
Wisconsin	13,382	15,619	15,308	573	475	862
Wyoming	152	267	80	10	8	7
Total	2,950,889	3,069,496	2,771,473	171,069	239,976	280,898

See footnotes at end of table.

Table 18. Natural Gas Deliveries to Electric Utility^a Consumers, by State, 1997-1999
(Million Cubic Feet) — Continued

State	1999					
	August	July	June	May	April	March
Alabama	5,683	4,717	1,937	1,289	1,247	925
Alaska	2,276	2,551	2,189	2,290	2,282	2,499
Arizona	6,690	6,138	5,287	4,279	4,483	2,013
Arkansas	7,963	7,104	5,602	3,982	2,579	2,034
California	12,228	14,988	12,409	11,714	18,722	19,915
Colorado	2,588	2,315	1,817	1,987	1,125	1,141
Connecticut	2,045	3,003	1,798	1,311	84	123
Delaware	3,300	3,804	2,531	2,052	673	1,687
District of Columbia	0	0	0	0	0	0
Florida	34,453	33,921	29,566	29,547	28,221	18,961
Georgia	6,506	4,351	1,722	1,374	3,046	220
Hawaii	0	0	0	0	0	0
Idaho	0	0	0	0	0	0
Illinois	3,824	10,896	4,828	2,672	5,295	2,863
Indiana	1,222	2,646	1,174	245	403	332
Iowa	722	1,616	646	278	348	189
Kansas	8,135	8,527	3,543	2,800	3,740	2,451
Kentucky	1,157	1,889	500	214	196	142
Louisiana	42,861	38,149	34,541	29,398	25,149	21,653
Maine	0	0	0	0	0	0
Maryland	2,845	5,877	1,826	478	1,382	289
Massachusetts	702	1,672	1,820	1,572	763	412
Michigan	4,642	7,611	5,206	5,210	4,041	3,881
Minnesota	807	1,913	728	657	438	437
Mississippi	14,292	14,102	9,827	9,505	10,077	4,296
Missouri	4,607	4,940	1,710	496	1,436	279
Montana	28	112	32	6	9	4
Nebraska	767	1,895	745	201	344	118
Nevada	6,682	6,824	5,834	5,642	4,813	4,274
New Hampshire	98	67	24	16	0	16
New Jersey	6,207	11,544	3,439	2,070	658	686
New Mexico	4,604	3,916	2,706	2,011	3,104	2,789
New York	19,803	26,219	22,476	23,122	14,099	12,815
North Carolina	3,197	3,807	1,102	131	421	25
North Dakota	0	0	0	0	0	0
Ohio	1,599	3,367	1,488	737	1,158	971
Oklahoma	26,954	24,982	18,440	13,921	13,186	12,492
Oregon	2,018	1,575	876	2,032	1,069	219
Pennsylvania	1,898	3,241	2,071	465	284	315
Rhode Island	0	0	0	0	0	0
South Carolina	1,857	2,291	389	76	109	48
South Dakota	427	646	213	215	279	232
Tennessee	1,218	1,208	594	58	141	0
Texas	180,640	152,748	127,509	104,215	97,047	81,573
Utah	592	654	598	166	341	392
Vermont	133	0	2	1	2	6
Virginia	3,367	4,066	1,885	2,229	1,812	2,093
Washington	436	52	39	560	503	6
West Virginia	17	25	32	48	29	35
Wisconsin	1,783	4,044	1,895	1,432	553	568
Wyoming	5	8	68	6	4	13
Total	433,878	436,024	323,665	272,705	255,694	206,430

See footnotes at end of table.

Table 18. Natural Gas Deliveries to Electric Utility^a Consumers, by State, 1997-1999
(Million Cubic Feet) — Continued

State	1999		1998			
	February	January	Total	December	November	October
Alabama	550	561	25,546	789	568	973
Alaska	2,519	2,733	28,784	2,957	2,669	2,190
Arizona	1,783	2,424	38,674	3,738	2,716	4,777
Arkansas	1,376	564	40,576	367	122	1,753
California	19,517	20,060	271,154	17,740	20,126	25,310
Colorado	981	438	10,627	918	1,046	684
Connecticut	1	29	10,719	123	9	209
Delaware	912	1,131	11,135	911	1,152	985
District of Columbia	0	0	0	0	0	0
Florida	13,119	15,422	281,346	17,667	18,413	28,024
Georgia	20	16	22,371	259	337	741
Hawaii	0	0	0	0	0	0
Idaho	0	0	0	0	0	0
Illinois	1,357	2,470	56,337	1,469	1,465	1,426
Indiana	147	517	9,096	237	172	389
Iowa	193	145	5,947	144	147	177
Kansas	1,042	1,184	36,896	1,679	2,097	1,602
Kentucky	90	438	5,760	136	151	206
Louisiana	17,481	21,493	318,395	18,345	20,877	24,381
Maine	0	0	0	0	0	0
Maryland	138	444	12,303	499	188	232
Massachusetts	51	122	18,427	725	777	918
Michigan	3,061	3,649	48,321	3,449	3,163	3,934
Minnesota	151	294	7,738	120	268	504
Mississippi	4,678	5,748	76,362	4,126	3,553	4,004
Missouri	310	533	16,035	515	521	228
Montana	5	53	522	36	33	48
Nebraska	44	40	5,044	106	35	154
Nevada	3,699	4,578	60,937	5,362	4,649	5,732
New Hampshire	0	32	149	0	25	0
New Jersey	343	1,022	30,996	792	804	376
New Mexico	2,322	2,563	39,034	2,876	2,246	2,708
New York	8,397	8,041	208,348	10,911	8,116	15,872
North Carolina	3	34	12,418	36	29	136
North Dakota	0	0	0	0	0	0
Ohio	333	312	7,663	351	170	272
Oklahoma	7,519	10,588	174,577	13,066	11,482	11,983
Oregon	936	1,532	28,883	3,009	4,188	3,701
Pennsylvania	105	261	6,890	357	98	220
Rhode Island	0	0	15,589	0	0	0
South Carolina	21	14	5,893	42	97	72
South Dakota	120	125	2,865	189	190	61
Tennessee	0	0	6,213	0	0	190
Texas	55,651	66,368	1,242,574	71,865	61,712	95,036
Utah	337	331	5,945	493	165	648
Vermont	2	5	188	4	3	7
Virginia	1,918	1,666	20,386	757	625	1,435
Washington	40	28	13,352	635	1,742	3,318
West Virginia	24	27	417	25	56	52
Wisconsin	648	550	16,348	730	589	486
Wyoming	14	9	271	5	6	13
Total	151,958	178,592	3,258,054	188,557	177,596	246,171

See footnotes at end of table.

Table 18. Natural Gas Deliveries to Electric Utility^a Consumers, by State, 1997-1999
(Million Cubic Feet) — Continued

State	1998					
	September	August	July	June	May	April
Alabama	4,213	5,129	5,071	4,763	2,843	296
Alaska	2,402	2,038	2,163	2,102	2,420	2,274
Arizona	6,200	8,185	6,791	1,986	674	1,127
Arkansas	6,764	8,176	7,022	6,618	5,431	2,262
California	31,816	34,624	26,020	15,338	13,746	18,053
Colorado	1,378	1,419	1,763	914	690	581
Connecticut	1,605	2,672	1,582	1,708	1,385	157
Delaware	1,319	1,672	1,648	1,196	900	548
District of Columbia	0	0	0	0	0	0
Florida	27,465	29,246	31,965	33,183	26,818	15,852
Georgia	3,350	5,027	5,457	4,959	1,891	41
Hawaii	0	0	0	0	0	0
Idaho	0	0	0	0	0	0
Illinois	6,084	7,669	7,640	7,325	7,006	4,790
Indiana	957	1,695	1,911	1,732	1,102	231
Iowa	1,099	1,049	933	749	674	288
Kansas	6,109	7,062	7,713	5,133	3,088	575
Kentucky	978	1,060	649	950	1,017	107
Louisiana	36,591	44,636	43,677	38,806	31,804	18,072
Maine	0	0	0	0	0	0
Maryland	2,565	3,146	2,186	1,396	932	373
Massachusetts	1,127	1,965	1,404	2,164	2,661	1,575
Michigan	5,415	5,520	4,553	5,074	4,196	3,582
Minnesota	1,538	1,461	1,389	979	792	264
Mississippi	9,141	11,125	10,887	10,629	8,715	4,398
Missouri	3,067	3,997	3,750	2,425	947	208
Montana	69	83	80	26	89	15
Nebraska	955	1,161	1,022	702	621	173
Nevada	6,460	8,818	8,189	4,036	3,932	3,926
New Hampshire	0	26	37	35	0	0
New Jersey	3,446	6,216	7,105	4,303	3,925	1,248
New Mexico	3,782	4,850	5,283	4,019	3,015	3,446
New York	20,464	34,201	29,277	24,080	18,922	9,089
North Carolina	2,132	3,116	2,041	3,788	1,026	12
North Dakota	0	0	0	0	0	0
Ohio	1,333	1,426	1,307	1,103	1,005	179
Oklahoma	21,106	26,807	26,740	20,703	13,832	7,905
Oregon	4,014	3,781	3,008	835	176	2,265
Pennsylvania	561	455	1,411	2,017	622	260
Rhode Island	0	2,251	2,238	1,453	1,943	1,606
South Carolina	919	1,237	1,239	1,413	687	37
South Dakota	366	608	627	315	366	33
Tennessee	1,860	1,123	1,407	1,202	432	0
Texas	143,064	161,408	174,322	153,383	115,390	82,922
Utah	1,206	1,323	1,126	160	157	153
Vermont	11	8	15	7	12	6
Virginia	3,323	3,645	2,969	2,253	2,157	698
Washington	2,749	3,470	621	33	14	152
West Virginia	20	34	53	46	30	22
Wisconsin	2,044	2,338	3,059	2,554	2,279	394
Wyoming	9	1	5	10	6	8
Total	381,075	456,960	449,354	378,607	290,368	190,201

^a Includes all steam electric utility generating plants with a combined capacity of 50 megawatts or greater.

Notes: Geographic coverage is the 50 States and the District of Columbia.

See Appendix A, Explanatory Note 5 for discussion of computations and revision policy.

Source: Form EIA-759, "Monthly Power Plant Report."

Table 19. Natural Gas Deliveries to All Consumers, by State, 1997-1999

(Million Cubic Feet)

State	YTD 1999	YTD 1998	YTD 1997	1999		
				November	October	September
Alabama	270,115	274,077	261,459	24,278	21,729	21,280
Alaska	133,413	132,475	133,991	14,826	12,838	9,330
Arizona	127,485	120,323	100,721	9,120	11,375	9,666
Arkansas	NA	233,518	220,694	NA	NA	NA
California	1,770,389	1,738,429	1,659,496	148,663	159,544	149,147
Colorado	NA	240,212	229,294	NA	NA	NA
Connecticut	115,002	108,490	118,694	11,238	8,109	6,661
Delaware	52,093	36,803	42,118	3,086	3,810	3,712
District of Columbia	NA	27,067	29,019	2,329	1,379	1,187
Florida	NA	427,510	439,205	40,746	^R 47,498	48,208
Georgia	NA	315,594	312,569	NA	NA	NA
Hawaii	2,505	2,086	2,059	223	228	224
Idaho	57,115	55,270	54,455	5,377	4,484	3,630
Illinois	849,715	825,405	929,737	82,317	64,641	43,467
Indiana	NA	455,130	481,829	NA	NA	NA
Iowa	200,075	197,901	213,753	18,009	14,629	11,394
Kansas	NA	236,276	224,051	13,972	10,070	^R 13,405
Kentucky	169,161	164,345	175,831	16,938	12,576	10,008
Louisiana	1,247,986	1,198,717	1,247,462	104,178	108,034	111,788
Maine	5,083	4,990	5,514	561	452	297
Maryland	NA	156,542	172,589	14,653	^R 10,498	9,039
Massachusetts	NA	303,941	339,286	NA	NA	NA
Michigan	759,822	721,780	832,166	73,980	53,279	36,485
Minnesota	NA	264,410	294,537	NA	20,683	13,799
Mississippi	NA	185,641	187,321	16,247	15,635	15,656
Missouri	NA	226,123	240,284	17,670	12,423	10,842
Montana	48,240	46,910	46,724	5,137	3,731	2,376
Nebraska	101,967	116,384	113,672	7,109	7,025	6,566
Nevada	134,518	127,672	115,431	10,985	11,055	11,456
New Hampshire	NA	17,070	18,377	1,688	1,266	1,014
New Jersey	NA	515,825	545,622	NA	NA	NA
New Mexico	NA	110,625	106,426	14,721	NA	NA
New York	NA	1,030,414	1,095,264	NA	NA	NA
North Carolina	194,524	187,649	182,184	16,937	10,697	12,148
North Dakota	NA	36,093	38,178	NA	2,498	1,933
Ohio	NA	696,833	770,309	71,307	53,765	37,153
Oklahoma	380,355	443,908	407,175	25,797	25,948	27,979
Oregon	NA	170,615	139,337	18,900	17,034	13,426
Pennsylvania	561,850	518,864	572,352	53,852	39,821	29,935
Rhode Island	57,178	79,104	73,390	5,458	3,664	3,433
South Carolina	139,866	139,717	134,329	13,032	11,009	9,793
South Dakota	25,509	25,647	28,545	2,122	1,663	986
Tennessee	NA	235,484	227,379	20,068	23,709	19,216
Texas	NA	3,305,257	3,264,997	253,373	220,917	317,700
Utah	113,606	120,133	117,177	12,019	9,991	7,163
Vermont	7,178	6,831	7,064	698	529	413
Virginia	NA	210,081	202,592	17,504	13,152	NA
Washington	NA	227,775	191,645	NA	NA	NA
West Virginia	NA	93,769	104,884	NA	6,813	5,341
Wisconsin	326,824	309,453	348,816	32,142	26,755	17,578
Wyoming	NA	69,541	63,282	NA	NA	NA
Total	17,545,601	17,494,710	17,863,283	1,538,716	^R1,352,477	^R1,300,640

See footnotes at end of table.

Table 19. Natural Gas Deliveries to All Consumers, by State, 1997-1999

(Million Cubic Feet) — Continued

State	1999					
	August	July	June	May	April	March
Alabama	25,441	24,155	20,890	20,655	24,458	29,873
Alaska	8,852	11,181	9,997	11,306	11,803	14,299
Arizona	11,612	11,036	10,750	11,297	13,342	11,117
Arkansas	22,850	20,392	19,737	18,551	20,551	23,164
California	150,340	139,818	130,695	143,874	165,282	174,845
Colorado	NA	NA	15,549	23,494	25,892	28,747
Connecticut	7,655	8,706	7,572	8,812	9,935	14,524
Delaware	5,298	5,945	4,459	4,687	4,066	6,212
District of Columbia	1,155	NA	1,339	1,936	3,245	4,658
Florida	NA	49,047	44,453	45,008	45,358	37,177
Georgia	NA	16,320	12,136	13,102	21,069	30,255
Hawaii	222	229	229	222	231	226
Idaho	2,952	3,303	3,694	4,982	6,275	7,004
Illinois	40,702	48,586	42,991	48,143	76,127	118,522
Indiana	28,248	31,153	31,658	NA	NA	NA
Iowa	10,625	12,156	10,629	13,448	19,774	25,814
Kansas	^R 22,784	21,045	14,968	NA	21,489	26,377
Kentucky	10,514	10,479	9,588	10,796	14,490	23,847
Louisiana	124,569	121,702	118,339	117,757	110,878	111,845
Maine	278	251	305	338	435	676
Maryland	10,586	NA	9,584	NA	16,031	23,839
Massachusetts	NA	NA	28,815	24,380	34,711	44,616
Michigan	34,329	39,894	42,217	53,208	75,392	111,770
Minnesota	15,450	14,400	14,565	17,138	24,393	36,595
Mississippi	22,332	22,609	18,524	18,779	NA	^R 17,647
Missouri	13,798	15,376	12,071	13,690	21,758	30,564
Montana	2,079	2,345	2,864	4,088	5,177	5,599
Nebraska	6,605	9,405	5,749	^R 7,290	7,565	12,426
Nevada	12,157	12,209	11,047	12,008	12,142	12,810
New Hampshire	945	874	943	NA	1,909	2,539
New Jersey	NA	NA	NA	NA	NA	NA
New Mexico	NA	9,598	8,431	8,750	NA	15,967
New York	NA	NA	NA	NA	NA	NA
North Carolina	15,798	15,799	13,087	13,814	18,212	28,528
North Dakota	1,588	1,666	1,818	2,600	3,371	4,608
Ohio	NA	38,118	38,595	46,433	72,087	108,779
Oklahoma	39,857	37,937	32,876	30,438	36,355	37,996
Oregon	41,786	11,549	11,834	15,055	16,579	NA
Pennsylvania	29,960	30,386	31,317	37,041	55,520	81,219
Rhode Island	3,229	4,001	4,031	4,942	5,782	6,963
South Carolina	11,327	11,252	9,776	10,716	14,194	17,226
South Dakota	1,355	1,652	1,257	1,683	2,779	3,307
Tennessee	18,073	17,386	16,639	NA	NA	28,046
Texas	341,314	291,236	289,088	NA	264,352	262,333
Utah	6,158	7,198	5,585	8,109	12,336	12,602
Vermont	443	295	327	492	756	1,017
Virginia	21,168	20,687	17,342	NA	22,821	29,716
Washington	NA	NA	NA	NA	NA	NA
West Virginia	7,902	5,735	NA	6,188	NA	NA
Wisconsin	17,388	19,010	17,359	19,893	28,656	43,163
Wyoming	NA	NA	4,069	4,924	5,792	6,234
Total	^R1,430,958	1,365,905	1,287,254	^R1,373,143	1,614,557	^R1,977,883

See footnotes at end of table.

Table 19. Natural Gas Deliveries to All Consumers, by State, 1997-1999

(Million Cubic Feet) — Continued

State	1999		1998			
	February	January	Total	December	November	October
Alabama	26,353	31,003	298,102	24,023	20,725	20,081
Alaska	13,635	15,345	147,426	14,951	13,451	12,143
Arizona	13,076	15,094	134,871	14,397	9,456	10,331
Arkansas	21,707	28,207	254,142	20,624	16,270	16,098
California	196,913	211,269	1,933,371	192,210	154,589	151,911
Colorado	32,318	37,728	271,849	31,624	21,684	14,392
Connecticut	15,078	16,712	120,955	12,389	9,140	7,053
Delaware	5,203	5,616	40,769	3,965	3,593	2,875
District of Columbia	4,857	5,400	30,115	3,043	2,293	1,337
Florida	28,845	32,810	460,082	32,489	32,777	41,312
Georgia	32,026	37,187	349,701	34,095	27,346	20,377
Hawaii	238	233	2,654	568	183	172
Idaho	7,448	7,967	62,018	6,712	5,357	3,949
Illinois	118,476	165,743	944,563	119,098	90,335	58,216
Indiana	62,390	80,565	513,375	58,178	45,538	35,466
Iowa	26,556	37,042	223,826	25,924	20,513	14,848
Kansas	25,841	NA	260,044	23,768	20,997	14,868
Kentucky	22,029	27,895	186,990	22,641	17,693	11,891
Louisiana	99,953	118,943	1,312,174	113,450	91,988	105,471
Maine	578	913	5,663	673	564	455
Maryland	22,281	26,844	176,323	19,719	14,642	10,097
Massachusetts	35,459	28,118	335,874	31,926	28,471	21,028
Michigan	107,071	132,196	813,457	91,646	71,928	49,532
Minnesota	41,060	52,931	305,174	40,732	30,299	20,231
Mississippi	16,431	21,785	201,209	15,567	12,925	12,317
Missouri	NA	45,867	253,682	27,553	17,763	11,118
Montana	6,596	8,249	54,071	7,152	5,418	3,891
Nebraska	13,574	18,653	127,779	11,394	9,362	6,287
Nevada	13,191	15,458	142,970	15,265	11,777	11,255
New Hampshire	2,590	3,115	19,103	2,033	1,734	1,219
New Jersey	NA	NA	579,099	63,273	47,341	32,959
New Mexico	14,028	NA	127,354	16,540	10,140	7,377
New York	NA	NA	1,135,250	104,380	84,394	68,342
North Carolina	21,862	27,642	206,129	18,480	15,666	11,738
North Dakota	5,967	5,837	40,782	4,686	3,807	2,199
Ohio	107,807	121,148	794,255	96,990	73,088	50,339
Oklahoma	36,967	48,205	483,117	39,100	31,825	33,453
Oregon	19,210	21,825	192,094	21,441	18,938	15,667
Pennsylvania	82,150	90,648	587,218	68,314	53,193	35,593
Rhode Island	7,279	8,396	85,811	6,701	6,093	5,105
South Carolina	14,069	17,472	153,476	13,758	12,286	10,471
South Dakota	3,646	5,058	29,383	3,735	2,813	1,279
Tennessee	28,478	37,777	263,778	28,282	21,151	17,009
Texas	257,136	319,453	3,634,920	329,660	276,571	281,344
Utah	15,610	16,835	139,380	19,111	12,732	10,647
Vermont	1,023	1,184	7,726	895	673	453
Virginia	28,564	29,218	234,692	24,576	20,099	16,212
Washington	NA	NA	254,067	26,180	22,554	14,778
West Virginia	11,819	14,083	104,879	11,105	9,102	6,858
Wisconsin	43,687	61,193	355,650	46,138	33,976	22,684
Wyoming	NA	7,649	77,656	8,105	6,575	5,451
Total	1,951,709	2,352,359	19,469,047	1,969,258	1,571,825	1,340,176

See footnotes at end of table.

Table 19. Natural Gas Deliveries to All Consumers, by State, 1997-1999

(Million Cubic Feet) — Continued

State	1998					
	September	August	July	June	May	April
Alabama	21,745	24,088	23,312	23,855	23,888	24,090
Alaska	10,517	10,964	10,575	10,469	11,161	12,167
Arizona	10,952	13,311	12,061	7,474	7,585	10,135
Arkansas	21,593	23,043	21,240	20,839	20,817	20,986
California	162,464	164,775	147,533	119,820	139,639	153,492
Colorado	11,864	12,964	14,250	12,170	20,231	26,502
Connecticut	6,782	8,162	7,334	7,271	7,919	10,822
Delaware	2,860	3,235	3,134	2,836	2,927	3,300
District of Columbia	1,172	1,170	1,239	1,345	1,718	3,023
Florida	41,332	42,655	45,868	47,429	41,714	31,879
Georgia	17,928	24,063	24,012	25,597	22,830	27,346
Hawaii	180	195	179	194	181	194
Idaho	3,407	3,205	3,431	3,877	4,188	5,686
Illinois	44,732	44,698	42,354	45,603	50,910	79,423
Indiana	30,493	28,161	28,657	29,491	32,226	40,505
Iowa	11,617	11,796	11,485	10,720	12,466	18,593
Kansas	16,265	20,877	23,257	18,672	17,273	18,921
Kentucky	10,032	10,020	9,768	10,185	11,514	14,054
Louisiana	119,369	128,563	124,823	112,456	108,478	99,262
Maine	298	281	253	308	337	449
Maryland	10,384	11,208	10,038	9,691	10,561	14,208
Massachusetts	15,147	17,943	18,061	21,382	22,902	31,899
Michigan	35,851	34,403	33,947	42,173	49,710	76,362
Minnesota	14,566	14,455	13,686	14,631	14,641	21,694
Mississippi	17,247	19,131	18,881	18,772	17,516	14,967
Missouri	12,406	13,815	13,074	12,721	13,657	21,818
Montana	2,483	2,365	2,428	2,771	3,114	4,718
Nebraska	6,143	8,961	11,770	7,207	8,128	10,921
Nevada	10,223	13,454	12,962	9,487	10,190	11,365
New Hampshire	857	909	871	966	1,203	1,760
New Jersey	31,628	33,055	33,448	32,035	42,313	48,704
New Mexico	7,864	8,963	9,340	7,220	7,831	10,404
New York	66,050	85,071	83,660	74,133	77,734	93,844
North Carolina	12,824	14,096	12,467	14,893	14,034	17,142
North Dakota	2,231	2,153	2,039	2,393	2,856	3,609
Ohio	36,314	35,683	37,322	38,303	45,219	67,547
Oklahoma	44,090	48,570	47,424	41,299	33,829	33,633
Oregon	14,484	14,451	13,385	11,439	11,272	16,113
Pennsylvania	27,995	27,864	28,259	31,648	34,134	50,761
Rhode Island	4,453	6,287	6,773	6,027	7,384	8,225
South Carolina	10,756	10,940	10,154	11,297	11,457	12,168
South Dakota	1,297	1,541	1,597	1,209	2,115	2,270
Tennessee	15,757	15,925	14,959	15,388	17,452	21,560
Texas	320,315	349,628	372,879	320,689	292,221	263,728
Utah	7,354	6,552	6,674	6,965	7,596	12,265
Vermont	403	301	325	347	409	716
Virginia	15,119	15,975	15,194	14,715	14,539	17,980
Washington	19,336	20,249	15,353	12,987	12,226	23,319
West Virginia	5,594	5,542	5,524	5,794	6,493	9,439
Wisconsin	17,828	17,482	15,973	18,607	19,431	27,909
Wyoming	4,274	4,335	4,658	5,017	6,471	6,187
Total	1,336,874	1,437,532	1,427,891	1,322,821	1,356,636	1,558,062

^R Revised Data.

NA Not Available.

Notes: Geographic coverage is the 50 States and the District of Columbia. Gas volumes delivered for use as vehicle fuel are included in the annual total for commercial deliveries but not in the monthly components. See

Appendix A, Explanatory Note 5 for discussion of computations and revision policy.

Source: Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers" and Form EIA-759, "Monthly Power Plant Report."

Table 20. Average City Gate Price, by State, 1997-1999

(Dollars per Thousand Cubic Feet)

State	YTD 1999	YTD 1998	YTD 1997	1999				
				November	October	September	August	July
Alabama	3.02	3.18	3.88	3.74	3.45	3.61	3.62	3.33
Alaska	1.32	1.72	1.81	1.34	1.36	1.41	1.11	1.26
Arizona	2.73	2.60	3.27	3.37	3.30	3.66	3.52	3.26
Arkansas	NA	2.90	3.24	NA	NA	NA	2.98	3.04
California	2.59	2.33	3.01	3.25	3.35	3.00	2.80	2.51
Colorado	NA	2.35	2.97	NA	NA	NA	NA	NA
Connecticut	4.98	5.00	5.05	7.17	4.58	5.85	4.52	5.39
Delaware	3.53	2.93	3.71	3.48	2.73	4.01	3.53	4.43
District of Columbia	—	—	—	—	—	—	—	—
Florida	3.33	3.41	3.99	3.50	3.74	3.60	3.53	3.22
Georgia	NA	3.40	4.06	NA	NA	NA	NA	3.42
Hawaii	5.44	5.34	6.44	7.20	6.48	6.23	5.59	5.61
Idaho	2.18	1.97	2.18	3.07	2.94	3.27	2.74	2.72
Illinois	2.98	2.77	3.33	3.55	3.41	3.87	3.73	3.23
Indiana	NA	2.45	3.07	NA	NA	NA	2.50	2.02
Iowa	3.15	3.45	4.00	3.95	3.49	3.71	3.97	3.54
Kansas	NA	2.98	3.46	3.60	3.41	3.91	4.88	2.52
Kentucky	3.24	3.26	3.78	3.82	3.63	3.46	2.85	3.06
Louisiana	2.49	2.31	3.06	3.84	3.16	3.34	2.46	2.24
Maine	NA	3.38	3.95	2.66	3.37	2.69	3.18	5.39
Maryland	NA	3.94	4.10	4.28	4.80	5.38	6.24	NA
Massachusetts	NA	4.15	3.99	NA	NA	NA	NA	NA
Michigan	2.82	2.78	2.97	2.95	2.86	2.83	2.79	2.83
Minnesota	NA	2.96	3.61	NA	2.85	3.72	3.52	3.30
Mississippi	NA	2.99	3.40	3.49	3.29	3.30	3.05	2.84
Missouri	3.40	3.44	3.87	3.87	4.23	5.38	5.25	5.14
Montana	2.52	2.43	3.35	3.00	2.65	2.30	2.12	2.08
Nebraska	3.07	3.01	4.12	3.79	3.14	3.28	2.33	3.25
Nevada	2.47	3.10	3.52	3.01	3.20	3.94	5.42	0.83
New Hampshire	3.77	3.73	4.16	4.84	3.40	4.12	3.96	4.77
New Jersey	NA	3.67	4.25	NA	NA	NA	NA	NA
New Mexico	NA	2.06	2.57	2.64	NA	NA	NA	2.06
New York	NA	2.61	4.31	NA	NA	NA	NA	NA
North Carolina	3.30	3.54	4.00	3.94	3.74	3.90	3.52	3.21
North Dakota	3.01	2.78	3.44	4.13	3.38	3.41	3.35	2.90
Ohio	NA	4.77	5.33	4.66	4.90	5.21	NA	5.07
Oklahoma	2.77	2.55	3.10	3.56	2.64	2.84	1.87	2.19
Oregon	2.92	2.78	2.61	3.44	3.10	3.64	4.05	3.74
Pennsylvania	3.71	4.23	4.13	4.03	4.09	4.98	6.70	5.13
Rhode Island	3.79	4.17	4.56	4.37	4.79	4.95	4.88	5.41
South Carolina	3.46	3.41	3.83	3.86	3.73	4.14	3.85	3.63
South Dakota	3.49	3.35	3.68	4.05	3.37	3.50	4.02	4.03
Tennessee	NA	3.50	3.59	4.21	3.71	3.53	4.18	3.25
Texas	2.82	2.60	3.61	3.45	3.17	2.98	2.98	2.77
Utah	2.87	3.16	2.65	3.34	2.75	3.23	2.93	4.04
Vermont	3.06	2.59	2.28	3.85	3.42	2.68	2.70	2.63
Virginia	NA	3.82	4.21	4.37	3.73	7.51	5.60	7.13
Washington	NA	2.34	2.64	NA	NA	NA	NA	NA
West Virginia	NA	3.09	3.18	NA	3.46	1.33	NA	3.16
Wisconsin	3.12	3.37	3.72	4.03	3.34	4.26	4.14	3.84
Wyoming	NA	2.56	3.13	NA	3.28	3.99	3.81	3.51
Total	3.09	3.06	3.70	3.75	3.50	3.50	3.37	3.11

See footnotes at end of table.

Table 20. Average City Gate Price, by State, 1997-1999

(Dollars per Thousand Cubic Feet) — Continued

State	1999						1998	
	June	May	April	March	February	January	Total	December
Alabama	3.53	2.86	2.70	2.65	2.79	2.62	3.17	3.16
Alaska	1.27	1.23	1.32	1.33	1.34	1.32	1.72	1.73
Arizona	3.16	3.03	2.39	2.18	2.19	2.17	2.55	2.31
Arkansas	NA	NA	2.71	2.58	3.40	2.69	2.94	3.13
California	2.57	2.71	2.17	2.07	2.25	2.23	2.38	2.75
Colorado	2.44	2.36	1.14	1.84	2.07	2.25	2.40	2.74
Connecticut	4.33	5.19	4.87	4.57	4.74	4.44	5.06	5.51
Delaware	5.10	3.91	3.12	3.33	3.68	3.63	3.02	4.10
District of Columbia	—	—	—	—	—	—	—	—
Florida	3.27	3.27	2.99	3.11	3.19	3.33	3.42	3.50
Georgia	4.10	NA	3.11	3.33	3.45	4.41	3.51	4.34
Hawaii	5.45	4.72	4.68	4.53	4.47	5.07	5.33	5.17
Idaho	1.50	1.69	1.94	1.82	1.92	1.76	1.95	1.86
Illinois	3.17	3.62	2.63	2.51	2.59	2.49	2.77	2.75
Indiana	2.05	NA	NA	NA	2.26	2.11	2.45	2.43
Iowa	4.26	3.63	3.03	2.77	3.02	2.63	3.34	2.79
Kansas	3.08	2.94	2.54	NA	NA	NA	2.96	2.79
Kentucky	2.89	3.63	3.72	2.79	3.10	3.21	3.23	3.08
Louisiana	2.27	2.41	2.14	2.16	2.19	2.18	2.33	2.48
Maine	3.67	NA	5.48	3.05	2.84	3.27	3.43	3.82
Maryland	5.86	NA	NA	NA	NA	2.87	4.12	5.70
Massachusetts	NA	5.89	NA	NA	NA	NA	4.01	3.15
Michigan	2.63	2.83	2.75	2.79	3.02	2.79	2.80	3.05
Minnesota	3.23	2.87	2.49	2.70	2.84	2.60	2.98	3.04
Mississippi	2.49	2.66	NA	2.61	2.71	NA	3.00	3.11
Missouri	4.90	4.56	3.43	2.75	2.89	2.49	3.33	2.77
Montana	2.20	1.37	2.39	2.98	2.70	2.76	2.43	2.44
Nebraska	3.24	3.45	2.94	2.90	3.11	2.90	3.02	3.10
Nevada	3.60	3.07	2.13	2.31	2.54	2.42	3.02	2.65
New Hampshire	4.06	3.32	3.59	3.24	3.56	3.73	3.75	3.88
New Jersey	NA	NA	NA	1.20	NA	NA	3.71	4.84
New Mexico	2.13	2.06	1.81	1.98	2.08	2.13	2.08	2.18
New York	NA	NA	NA	NA	NA	NA	2.65	3.04
North Carolina	3.34	3.52	3.25	2.73	3.00	3.11	3.49	3.09
North Dakota	2.83	2.97	2.57	2.58	2.84	2.85	2.81	3.01
Ohio	5.81	6.71	7.73	4.43	4.62	4.22	4.70	4.32
Oklahoma	2.47	2.23	2.35	2.36	5.21	2.41	2.55	2.54
Oregon	3.28	2.84	2.66	2.59	2.68	2.43	2.73	2.50
Pennsylvania	4.35	4.28	3.77	2.95	3.42	3.10	4.12	3.47
Rhode Island	4.73	4.46	4.09	3.06	3.20	3.32	3.78	1.26
South Carolina	3.80	3.85	3.43	2.86	3.09	3.14	3.39	3.24
South Dakota	3.72	4.21	3.37	3.25	3.37	3.18	3.24	2.69
Tennessee	2.75	2.81	NA	2.79	2.76	2.86	3.47	3.28
Texas	2.78	2.86	2.45	2.38	2.61	2.83	2.63	2.85
Utah	2.62	2.07	2.31	2.76	3.11	2.86	3.22	3.58
Vermont	3.12	3.34	3.07	2.92	3.01	2.85	2.58	2.52
Virginia	5.27	NA	3.70	3.35	2.97	3.31	3.74	3.28
Washington	NA	NA	NA	NA	NA	NA	2.34	2.38
West Virginia	3.89	2.64	NA	NA	3.21	6.98	3.17	3.80
Wisconsin	4.12	3.62	2.83	2.64	2.77	2.47	3.29	2.84
Wyoming	2.53	3.01	3.23	2.85	3.49	3.07	2.73	4.14
Total	3.18	3.25	2.91	2.67	2.94	2.84	3.07	3.10

See footnotes at end of table.

Table 20. Average City Gate Price, by State, 1997-1999

(Dollars per Thousand Cubic Feet) — Continued

State	1998							
	November	October	September	August	July	June	May	April
Alabama	3.17	3.50	3.24	3.50	3.68	3.56	3.38	3.11
Alaska	1.74	1.73	1.71	1.71	1.64	1.67	1.68	1.71
Arizona	2.54	2.62	2.77	2.85	2.85	2.60	2.93	2.81
Arkansas	3.03	2.93	1.88	2.38	3.23	2.31	3.00	2.96
California	2.49	2.22	1.98	2.46	2.39	2.34	2.49	2.33
Colorado	2.18	2.24	0.63	2.26	2.09	2.43	2.46	2.64
Connecticut	4.54	4.31	4.69	4.87	5.14	4.74	5.08	5.89
Delaware	3.83	3.75	3.90	2.79	2.93	4.35	1.79	2.63
District of Columbia	—	—	—	—	—	—	—	—
Florida	3.76	3.51	3.13	3.22	3.31	2.82	3.20	3.93
Georgia	3.24	3.08	3.37	3.44	3.57	3.01	3.55	3.63
Hawaii	5.14	4.95	5.12	5.06	4.77	4.86	5.21	5.21
Idaho	1.99	1.95	2.38	2.14	2.55	2.18	1.94	1.96
Illinois	2.65	2.43	2.24	2.49	3.16	2.16	3.64	2.90
Indiana	2.57	2.47	2.58	2.38	2.77	1.51	2.80	2.43
Iowa	3.05	4.98	4.00	4.03	4.05	1.99	4.12	3.33
Kansas	3.19	2.94	2.67	2.92	3.86	3.42	3.17	2.87
Kentucky	3.19	2.94	3.58	2.85	3.57	3.33	3.33	3.99
Louisiana	2.20	2.13	2.01	2.05	2.45	2.20	2.36	2.30
Maine	2.66	3.37	2.69	3.21	5.39	3.67	2.53	3.16
Maryland	3.38	4.15	13.58	5.83	7.57	5.89	5.54	4.37
Massachusetts	3.58	4.46	6.11	5.75	7.56	6.87	5.44	3.98
Michigan	2.86	2.61	2.69	2.79	2.92	2.50	2.69	2.78
Minnesota	3.04	2.74	2.78	3.06	3.31	2.97	3.28	2.95
Mississippi	3.06	2.91	2.65	2.67	3.07	2.86	2.88	3.18
Missouri	3.12	4.06	4.50	4.61	5.12	4.87	4.47	3.72
Montana	2.60	2.32	2.22	1.88	2.51	2.08	2.23	2.31
Nebraska	2.84	3.03	2.90	3.01	3.65	2.98	3.73	3.20
Nevada	2.60	2.48	3.79	4.43	3.75	3.37	3.25	3.00
New Hampshire	3.52	3.22	3.34	3.80	4.63	3.87	3.36	3.35
New Jersey	4.10	4.08	5.83	3.80	3.89	3.58	3.03	3.54
New Mexico	2.17	1.75	1.64	1.86	1.94	1.76	2.04	2.19
New York	2.84	2.83	2.56	2.44	2.85	2.84	3.11	3.27
North Carolina	3.16	3.46	3.20	3.43	3.95	3.83	3.66	3.91
North Dakota	3.10	3.05	2.11	2.49	2.57	2.34	2.74	2.86
Ohio	4.22	6.02	5.54	4.70	5.16	4.80	5.08	4.89
Oklahoma	2.52	2.16	2.73	2.61	2.38	2.51	2.46	2.36
Oregon	2.61	2.72	2.93	3.58	3.87	3.23	2.78	2.78
Pennsylvania	3.69	3.73	4.73	5.10	6.23	4.94	3.97	4.06
Rhode Island	4.05	4.07	4.30	4.66	4.82	4.69	4.68	4.26
South Carolina	3.30	3.40	3.35	3.46	3.96	3.65	3.81	3.58
South Dakota	3.07	2.93	3.91	4.68	4.27	2.90	4.42	4.37
Tennessee	3.57	3.06	2.42	2.77	3.12	3.10	3.40	6.62
Texas	2.59	2.37	2.09	2.35	2.62	2.36	2.65	2.68
Utah	3.07	2.94	3.37	3.48	2.64	2.73	2.62	2.89
Vermont	2.67	1.99	2.26	2.34	2.60	2.69	2.82	2.74
Virginia	3.31	3.80	4.86	5.14	4.96	4.32	4.37	3.92
Washington	1.79	2.46	2.37	2.20	2.16	2.60	2.37	2.60
West Virginia	3.55	3.22	2.58	2.43	2.76	2.91	3.43	3.60
Wisconsin	3.10	3.18	3.76	4.23	4.07	3.68	3.89	3.64
Wyoming	3.22	2.97	2.48	2.86	2.74	2.51	1.29	1.28
Total	2.99	2.99	2.78	3.01	3.31	2.98	3.12	3.23

NA Not Available.

— Not Applicable.

Notes: Geographic coverage is the 50 States and the District of Columbia. Prices in this table represent the average price of natural gas by State at the point where the gas transferred from a pipeline to a local distribution

company within the State. See Appendix A, Explanatory Note 5 for discussion of computations and revision policy.

Source: Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers."

Table 21. Average Price of Natural Gas Delivered to Residential Consumers, by State, 1997-1999

(Dollars per Thousand Cubic Feet)

State	YTD 1999	YTD 1998	YTD 1997	1999				
				November	October	September	August	July
Alabama	8.39	8.12	8.55	9.17	10.27	11.61	11.91	11.38
Alaska	3.67	3.69	3.80	3.58	3.70	3.84	4.27	4.31
Arizona	9.25	8.53	7.87	10.32	11.84	12.63	12.84	12.26
Arkansas	NA	6.86	6.74	NA	NA	NA	10.63	9.65
California	6.63	6.92	6.75	7.13	7.51	6.88	7.21	7.04
Colorado	NA	5.26	4.82	NA	NA	NA	NA	NA
Connecticut	10.41	10.55	10.36	10.89	11.17	10.95	11.45	11.73
Delaware	8.71	8.94	8.41	8.99	10.69	12.48	12.52	10.58
District of Columbia	NA	8.93	9.47	10.10	11.34	12.39	8.28	NA
Florida	12.01	11.28	11.92	12.87	14.38	14.65	14.31	13.77
Georgia	NA	7.49	7.70	NA	NA	NA	NA	11.45
Hawaii	18.86	19.28	21.87	19.50	20.03	19.71	19.38	18.71
Idaho	5.40	5.36	5.14	5.82	5.92	6.58	6.55	6.21
Illinois	5.56	5.61	6.05	6.31	6.91	8.49	9.46	8.85
Indiana	NA	6.70	6.52	NA	NA	NA	7.79	7.61
Iowa	6.11	6.14	6.20	6.52	7.56	9.24	13.37	9.40
Kansas	NA	6.06	6.50	7.02	7.58	9.02	8.66	8.77
Kentucky	5.68	6.17	6.37	5.87	7.00	7.53	8.16	8.17
Louisiana	6.84	6.66	7.30	8.44	9.10	9.59	9.37	8.55
Maine	7.60	8.17	8.48	7.40	7.61	8.26	9.13	9.11
Maryland	NA	8.32	8.52	9.02	11.79	12.70	12.97	NA
Massachusetts	NA	9.39	9.35	NA	NA	NA	NA	NA
Michigan	5.16	5.22	5.24	5.13	5.59	7.15	7.75	7.68
Minnesota	NA	5.53	5.86	NA	6.25	7.47	7.91	8.04
Mississippi	NA	6.03	6.46	7.03	7.62	6.99	7.77	7.22
Missouri	6.27	6.62	6.63	6.84	7.73	9.35	10.48	9.85
Montana	5.17	5.29	5.00	5.32	5.57	6.27	7.46	6.58
Nebraska	5.04	5.19	5.65	6.02	6.52	7.73	8.04	7.13
Nevada	7.27	7.17	6.28	7.18	8.24	8.85	9.03	8.86
New Hampshire	7.61	8.13	8.48	9.07	7.25	8.75	9.29	8.68
New Jersey	NA	7.21	7.98	NA	NA	NA	NA	NA
New Mexico	NA	5.73	6.50	3.17	NA	NA	NA	9.96
New York	NA	9.63	9.78	NA	NA	NA	NA	NA
North Carolina	8.23	8.59	9.18	8.95	10.76	11.70	13.19	11.74
North Dakota	5.21	5.18	4.89	5.71	6.10	7.31	7.90	7.54
Ohio	NA	6.48	6.84	6.57	6.76	8.04	NA	8.41
Oklahoma	5.80	5.99	6.37	8.06	8.21	9.13	9.49	8.80
Oregon	7.18	6.82	6.24	7.16	7.67	8.64	8.91	10.50
Pennsylvania	8.32	8.55	8.42	8.14	9.20	10.69	11.99	11.40
Rhode Island	9.52	9.58	9.71	10.00	10.45	12.23	12.29	11.52
South Carolina	8.58	8.22	8.50	8.85	9.37	10.20	10.46	10.20
South Dakota	5.78	5.69	5.72	6.27	7.09	8.26	9.81	8.69
Tennessee	NA	6.73	6.97	7.48	8.43	8.06	9.25	8.86
Texas	6.11	6.29	6.46	7.26	8.43	9.00	9.13	7.40
Utah	5.34	5.56	5.10	5.90	5.11	5.44	6.25	5.54
Vermont	7.06	6.56	6.44	7.51	7.63	9.33	9.38	9.33
Virginia	NA	8.65	8.73	9.57	12.04	14.20	14.40	13.85
Washington	NA	5.84	5.63	NA	NA	NA	NA	NA
West Virginia	NA	7.31	7.00	NA	8.09	9.61	NA	10.66
Wisconsin	6.21	6.18	6.46	6.98	5.47	7.21	7.45	7.14
Wyoming	5.31	5.23	4.38	5.65	5.45	6.09	6.63	6.74
Total	6.63	6.90	7.01	7.11	7.54	8.38	8.83	8.47

See footnotes at end of table.

Table 21. Average Price of Natural Gas Delivered to Residential Consumers, by State, 1997-1999

(Dollars per Thousand Cubic Feet) — Continued

State	1999						1998	
	June	May	April	March	February	January	Total	December
Alabama	10.98	9.83	7.83	7.03	8.29	7.13	8.21	9.06
Alaska	4.10	3.81	3.65	3.59	3.53	3.53	3.67	3.51
Arizona	11.03	9.57	8.75	8.57	8.17	8.03	8.50	8.34
Arkansas	9.45	8.25	6.70	6.16	6.94	5.66	6.85	6.82
California	6.82	6.22	5.98	6.22	6.54	6.82	6.92	6.88
Colorado	6.13	5.12	5.00	4.86	4.75	4.60	5.22	4.94
Connecticut	11.86	11.30	10.29	10.08	10.18	9.71	10.60	10.97
Delaware	10.97	9.32	8.39	8.05	8.10	8.05	8.90	8.58
District of Columbia	8.24	8.95	7.96	7.76	8.25	8.61	8.91	8.82
Florida	13.34	12.64	11.46	10.58	11.16	10.29	11.29	11.35
Georgia	10.16	NA	4.12	2.44	2.38	2.01	6.78	2.42
Hawaii	18.56	18.60	18.04	18.15	18.34	18.79	19.25	18.86
Idaho	5.83	5.46	5.31	5.10	5.13	5.03	5.33	5.15
Illinois	8.12	7.66	5.27	4.63	4.62	4.46	5.47	4.77
Indiana	6.76	NA	NA	NA	NA	5.36	6.56	5.75
Iowa	11.36	7.77	6.00	5.26	5.07	4.79	5.96	4.96
Kansas	7.74	6.65	5.60	NA	NA	NA	6.00	5.52
Kentucky	7.75	6.75	5.46	4.82	5.27	5.24	6.03	5.35
Louisiana	8.03	7.58	6.19	5.98	5.86	5.42	6.68	6.89
Maine	8.33	8.66	7.85	7.38	7.34	7.00	8.09	7.64
Maryland	11.87	NA	7.98	NA	NA	7.37	8.29	8.12
Massachusetts	NA	NA	NA	NA	9.19	9.39	9.42	9.67
Michigan	6.46	5.72	5.10	4.78	4.76	4.68	5.17	4.87
Minnesota	7.19	6.26	5.21	5.08	5.06	4.96	5.48	5.22
Mississippi	7.12	6.92	NA	^R 4.94	5.94	4.84	6.08	6.44
Missouri	6.09	7.08	6.06	5.41	5.70	5.71	6.57	6.20
Montana	5.99	4.66	4.95	4.94	4.93	4.75	5.25	4.99
Nebraska	6.76	^R 5.33	4.70	4.47	4.38	4.37	5.13	4.60
Nevada	8.15	7.39	7.00	6.94	6.75	6.70	7.11	6.74
New Hampshire	7.88	6.38	5.67	8.23	7.60	7.44	8.12	7.98
New Jersey	NA	NA	NA	NA	NA	NA	7.33	8.16
New Mexico	10.62	9.45	4.97	3.09	4.25	2.63	5.22	3.23
New York	NA	NA	NA	NA	NA	NA	9.59	9.30
North Carolina	12.98	8.76	7.92	6.20	8.40	7.56	8.69	9.45
North Dakota	7.23	5.19	4.71	4.76	4.67	4.62	5.16	5.01
Ohio	7.89	6.83	5.83	5.63	5.69	5.87	6.43	6.08
Oklahoma	3.77	6.95	5.59	5.33	5.48	4.45	5.93	5.51
Oregon	7.75	7.26	7.04	6.91	6.80	6.68	6.81	6.75
Pennsylvania	10.69	9.19	7.68	7.73	7.78	7.80	8.45	7.78
Rhode Island	11.36	9.79	9.48	8.88	8.90	8.71	9.56	9.40
South Carolina	9.89	8.48	8.17	7.81	9.14	8.25	8.30	8.95
South Dakota	8.46	6.48	5.43	5.00	5.09	4.89	5.59	4.99
Tennessee	9.32	NA	NA	6.36	6.06	5.71	6.73	6.74
Texas	7.90	6.94	6.00	5.18	5.20	4.89	6.16	5.40
Utah	5.78	4.83	4.19	5.59	5.33	5.51	5.57	5.61
Vermont	8.42	7.41	6.83	6.68	6.29	6.64	6.54	6.38
Virginia	13.36	NA	8.72	7.34	7.98	7.96	8.57	8.09
Washington	NA	NA	NA	NA	NA	NA	5.84	5.79
West Virginia	NA	NA	NA	NA	6.96	6.90	7.29	7.18
Wisconsin	6.70	5.91	6.13	6.05	6.28	5.82	6.15	6.00
Wyoming	5.94	5.08	5.03	5.19	5.03	4.98	5.19	4.91
Total	7.91	7.07	6.32	6.00	6.23	5.97	6.82	6.34

See footnotes at end of table.

Table 21. Average Price of Natural Gas Delivered to Residential Consumers, by State, 1997-1999

(Dollars per Thousand Cubic Feet) — Continued

State	1998							
	November	October	September	August	July	June	May	April
Alabama	10.01	10.99	10.77	10.84	11.17	10.95	9.01	7.80
Alaska	3.70	3.74	3.01	3.75	4.71	4.02	3.83	3.66
Arizona	9.85	11.96	12.93	13.11	12.17	10.95	9.52	8.09
Arkansas	6.79	8.12	8.80	8.98	9.02	8.71	7.58	6.42
California	6.79	6.87	7.00	7.20	7.06	7.31	7.00	6.79
Colorado	5.28	5.85	8.50	7.56	6.43	16.25	5.33	4.82
Connecticut	10.52	11.13	11.75	11.82	11.64	11.12	11.59	9.79
Delaware	9.44	11.69	12.86	12.69	11.74	11.06	9.50	8.56
District of Columbia	9.25	10.60	11.17	8.55	8.83	8.46	9.66	8.82
Florida	12.43	13.68	13.65	13.59	13.53	13.02	12.67	10.69
Georgia	3.45	8.03	15.61	16.04	16.85	11.80	13.61	7.14
Hawaii	19.39	19.25	19.39	18.29	18.58	18.73	19.00	19.19
Idaho	5.42	5.79	6.54	6.70	6.25	5.85	5.58	5.37
Illinois	5.02	5.98	8.08	8.18	8.71	8.11	7.96	5.81
Indiana	5.81	6.72	8.71	9.50	9.62	8.79	8.88	7.16
Iowa	5.75	7.39	11.08	10.95	11.75	8.48	7.87	6.42
Kansas	5.88	7.43	7.95	7.85	7.75	7.39	6.50	5.83
Kentucky	5.76	7.99	9.44	10.07	8.11	8.64	7.23	6.63
Louisiana	7.81	8.90	8.78	8.71	8.72	8.26	8.69	6.46
Maine	7.45	7.66	8.94	9.19	9.17	8.38	8.72	8.81
Maryland	7.92	10.06	11.22	11.50	12.01	10.81	9.84	8.35
Massachusetts	9.66	9.44	10.84	11.29	10.44	9.24	8.81	9.54
Michigan	4.85	5.43	7.03	7.42	7.19	6.29	5.91	5.16
Minnesota	5.31	6.02	7.05	7.33	7.58	7.16	6.57	5.63
Mississippi	4.48	7.74	7.80	7.84	7.84	7.56	6.66	6.09
Missouri	6.63	8.85	9.87	10.95	9.90	8.85	7.41	6.15
Montana	5.22	5.84	6.97	6.99	6.38	6.07	5.76	5.10
Nebraska	4.74	5.71	6.87	7.08	6.83	6.35	5.96	5.06
Nevada	7.14	8.00	9.25	9.27	8.69	7.74	7.30	6.90
New Hampshire	8.26	7.29	8.91	9.32	9.03	8.18	6.84	6.38
New Jersey	8.24	8.51	9.12	9.07	8.76	8.47	6.26	7.03
New Mexico	4.20	8.02	10.26	10.64	10.97	31.45	9.76	6.30
New York	9.50	11.62	12.66	13.24	7.08	11.99	10.73	9.56
North Carolina	8.31	11.70	12.53	13.25	12.02	11.78	9.26	7.89
North Dakota	5.05	5.65	7.64	9.81	7.04	6.98	5.92	5.09
Ohio	6.13	7.82	9.07	9.89	8.25	7.37	6.58	6.22
Oklahoma	6.15	8.42	9.25	9.09	8.67	8.14	6.55	5.39
Oregon	6.91	7.66	8.82	9.21	8.43	7.51	7.21	6.52
Pennsylvania	8.07	9.13	11.13	11.82	11.70	10.63	9.53	8.53
Rhode Island	9.80	10.79	12.16	12.15	11.95	10.95	9.68	9.51
South Carolina	8.77	9.56	10.05	10.29	10.13	9.70	8.21	7.65
South Dakota	5.35	6.34	8.38	8.63	8.90	6.54	6.89	5.88
Tennessee	7.04	8.58	8.87	9.44	9.12	8.46	7.36	6.82
Texas	6.43	7.98	8.59	8.77	8.66	7.76	7.15	6.15
Utah	5.72	4.74	6.08	6.95	6.64	5.34	5.67	4.81
Vermont	6.64	7.46	5.12	8.77	8.91	8.08	7.28	6.45
Virginia	8.10	10.85	12.39	12.60	12.09	11.60	10.03	8.44
Washington	5.63	6.09	6.20	6.22	6.12	5.99	5.90	5.82
West Virginia	7.34	8.19	9.82	10.54	10.67	9.81	8.16	7.51
Wisconsin	6.22	5.48	6.56	6.73	7.36	6.63	6.36	6.08
Wyoming	5.11	5.10	6.60	7.03	6.29	5.80	5.59	5.12
Total	6.58	7.60	8.96	9.25	8.53	8.51	7.70	6.81

^R Revised Data.^{NA} Not Available.

Notes: Data for 1998 are final. All other data are preliminary unless otherwise indicated. Geographic coverage is the 50 States and the District

of Columbia. See Appendix A, Explanatory Note 5 for discussion of computations and revision policy.

Source: Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers."

Table 22. Average Price of Natural Gas Sold to Commercial Consumers, by State, 1997-1999

(Dollars per Thousand Cubic Feet)

State	YTD 1999	YTD 1998	YTD 1997	1999				
				November	October	September	August	July
Alabama	6.68	6.60	7.05	7.07	6.88	7.22	7.31	7.22
Alaska	2.16	2.40	2.43	2.14	2.13	1.94	1.79	1.83
Arizona	6.18	5.97	5.29	6.34	6.32	6.27	6.38	6.13
Arkansas	NA	5.14	5.25	NA	NA	NA	5.77	5.69
California	5.78	6.37	6.36	6.38	6.33	5.96	6.08	5.68
Colorado	NA	4.36	4.00	NA	NA	NA	NA	NA
Connecticut	6.43	6.81	7.19	6.91	6.10	5.27	4.91	5.13
Delaware	7.02	7.07	6.71	7.21	7.51	8.20	8.78	8.29
District of Columbia	NA	7.32	8.03	8.72	8.35	8.14	6.92	NA
Florida	6.48	6.42	6.81	6.98	^R 6.85	6.90	6.66	6.47
Georgia	NA	6.34	6.55	NA	NA	NA	NA	6.55
Hawaii	14.19	14.18	15.97	15.90	15.71	14.90	14.45	14.46
Idaho	4.75	4.63	4.51	5.21	5.10	5.25	4.96	4.89
Illinois	5.23	5.13	5.46	6.18	6.36	7.26	^R 8.57	7.98
Indiana	NA	5.63	5.49	NA	NA	NA	NA	5.03
Iowa	4.73	4.78	5.18	5.28	5.47	5.80	6.19	6.25
Kansas	NA	4.97	5.42	6.09	5.54	4.78	4.92	5.48
Kentucky	4.98	5.48	5.76	5.61	5.78	5.60	4.35	5.75
Louisiana	5.68	5.61	6.26	6.68	6.37	6.49	6.23	5.79
Maine	6.75	7.27	7.68	6.68	6.55	6.89	6.89	6.81
Maryland	NA	6.59	6.63	7.52	^R 8.19	8.76	7.34	NA
Massachusetts	NA	7.28	7.25	NA	NA	NA	NA	NA
Michigan	4.88	4.92	5.02	4.93	5.18	5.71	6.08	5.86
Minnesota	4.43	4.39	4.87	5.08	4.62	5.02	4.65	4.50
Mississippi	NA	4.70	5.27	5.41	5.01	4.62	4.88	4.45
Missouri	5.32	5.70	5.82	5.54	5.40	5.58	5.81	5.68
Montana	5.11	5.16	4.73	5.37	5.67	5.87	6.54	5.99
Nebraska	4.07	4.30	4.82	4.62	4.33	4.36	4.11	3.84
Nevada	6.08	6.29	5.06	6.00	6.31	6.50	6.33	6.49
New Hampshire	NA	7.15	7.61	7.83	5.92	6.19	6.32	6.16
New Jersey	NA	3.78	6.01	NA	NA	NA	NA	NA
New Mexico	NA	4.23	4.58	2.68	NA	NA	NA	4.41
New York	NA	6.09	6.46	NA	NA	NA	NA	NA
North Carolina	6.18	6.57	7.00	6.83	6.61	6.13	6.28	6.13
North Dakota	NA	4.38	4.28	NA	5.05	5.21	4.97	5.07
Ohio	NA	5.85	6.29	6.04	5.91	6.17	NA	6.60
Oklahoma	5.01	5.20	5.36	5.81	5.23	5.28	5.36	5.43
Oregon	5.78	5.14	4.62	5.63	7.76	5.95	5.98	5.83
Pennsylvania	8.60	7.52	7.43	6.90	7.76	7.70	8.21	7.83
Rhode Island	8.03	8.13	8.23	8.01	8.15	8.58	14.12	8.91
South Carolina	6.46	6.44	6.65	7.16	6.05	6.12	6.01	5.90
South Dakota	4.43	4.50	4.65	4.86	5.36	5.56	5.99	5.29
Tennessee	NA	6.00	6.07	6.31	5.34	5.08	5.89	5.79
Texas	4.38	4.46	4.90	4.88	4.81	4.70	4.31	4.02
Utah	4.04	4.31	3.81	4.72	3.98	3.99	4.10	4.19
Vermont	5.46	5.13	5.18	5.98	5.54	5.68	5.76	5.72
Virginia	NA	6.13	6.46	6.35	6.59	6.50	6.33	6.22
Washington	NA	4.77	4.72	NA	NA	NA	NA	NA
West Virginia	NA	6.31	6.37	6.18	6.29	6.65	NA	6.76
Wisconsin	4.89	4.71	5.33	5.83	4.12	5.50	4.98	4.68
Wyoming	NA	4.83	3.72	NA	4.41	4.36	4.41	4.47
Total	5.23	5.52	5.81	5.46	^R5.34	5.40	^R5.30	5.23

See footnotes at end of table.

Table 22. Average Price of Natural Gas Sold to Commercial Consumers, by State, 1997-1999

(Dollars per Thousand Cubic Feet) — Continued

State	1999						1998	
	June	May	April	March	February	January	Total	December
Alabama	7.08	6.86	6.26	6.10	6.93	6.33	6.65	7.07
Alaska	1.76	1.95	2.28	2.34	2.38	2.44	2.41	2.46
Arizona	6.05	6.07	6.11	6.12	6.18	6.15	6.00	6.31
Arkansas	NA	NA	5.24	4.85	5.27	4.70	5.16	5.28
California	5.43	5.24	5.57	5.17	6.28	5.82	6.33	6.38
Colorado	4.38	4.18	NA	4.14	4.12	4.15	4.34	4.21
Connecticut	5.39	6.51	6.68	6.93	7.03	6.63	6.89	7.60
Delaware	7.89	7.31	6.82	6.69	6.59	6.68	7.05	6.89
District of Columbia	6.84	6.64	6.70	6.92	7.06	7.53	7.36	7.67
Florida	6.26	6.29	6.19	6.22	6.42	6.41	6.40	6.23
Georgia	5.99	NA	3.43	2.17	2.35	3.78	6.00	2.77
Hawaii	14.00	13.28	13.08	13.19	13.41	13.79	14.15	13.81
Idaho	4.92	4.85	4.83	4.49	4.59	4.46	4.62	4.59
Illinois	7.15	6.61	4.83	4.46	4.48	4.47	5.07	4.69
Indiana	NA	NA	NA	NA	4.52	4.39	5.50	4.72
Iowa	6.44	5.51	4.67	4.11	4.30	4.12	4.67	4.06
Kansas	5.85	5.54	4.91	NA	NA	NA	4.98	5.11
Kentucky	5.59	4.36	5.03	4.39	4.93	4.98	5.43	5.12
Louisiana	5.56	5.56	5.24	5.29	5.22	5.25	5.64	6.02
Maine	6.70	7.20	7.01	6.81	6.79	6.48	7.23	6.96
Maryland	8.29	NA	7.03	NA	NA	6.49	6.64	7.11
Massachusetts	6.12	6.24	7.79	7.72	NA	8.08	7.32	7.68
Michigan	5.67	5.14	4.94	4.69	4.68	4.65	4.90	4.78
Minnesota	4.61	4.38	4.01	4.20	4.25	4.33	4.39	4.37
Mississippi	4.44	4.79	NA	4.25	4.95	NA	4.74	5.04
Missouri	3.63	5.22	5.19	5.06	5.43	5.55	5.68	5.60
Montana	5.63	4.60	4.88	4.90	4.91	4.80	5.13	5.01
Nebraska	3.94	R3.84	3.77	3.98	4.00	4.14	4.25	3.77
Nevada	6.40	6.09	6.10	5.89	5.92	5.85	6.28	6.22
New Hampshire	5.98	NA	5.40	6.97	7.15	6.89	7.18	7.38
New Jersey	NA	NA	NA	NA	NA	NA	3.70	3.15
New Mexico	5.59	5.25	4.08	3.53	3.40	2.45	4.04	3.15
New York	NA	NA	NA	NA	NA	NA	6.08	6.05
North Carolina	6.12	5.85	5.62	5.87	6.44	6.25	6.63	7.16
North Dakota	4.98	3.94	3.94	4.09	4.04	4.19	4.37	4.33
Ohio	6.55	5.82	5.37	5.26	5.33	5.67	5.83	5.69
Oklahoma	5.98	4.98	4.70	5.09	5.23	4.49	5.05	4.10
Oregon	5.75	5.65	5.65	5.63	5.64	5.51	5.25	5.96
Pennsylvania	8.96	7.09	19.91	7.00	7.22	7.26	7.43	6.82
Rhode Island	8.70	8.45	8.03	7.73	7.75	7.74	8.12	8.02
South Carolina	6.00	6.04	6.45	6.40	6.94	6.75	6.48	6.77
South Dakota	5.37	4.91	4.23	3.90	4.16	3.92	4.43	3.98
Tennessee	5.48	5.39	NA	5.68	5.72	5.67	6.04	6.40
Texas	4.37	4.16	4.47	4.04	4.29	4.36	4.44	4.30
Utah	3.85	3.31	3.24	4.25	4.14	4.20	4.35	4.53
Vermont	5.64	5.57	5.50	5.49	5.23	5.12	5.08	4.72
Virginia	5.79	NA	5.82	5.67	6.04	5.81	6.12	6.02
Washington	NA	NA	NA	NA	NA	NA	4.75	4.68
West Virginia	NA	6.88	6.06	6.19	6.23	6.23	6.26	5.97
Wisconsin	4.64	4.28	4.41	4.77	4.89	5.04	4.70	4.68
Wyoming	4.53	4.51	4.44	4.51	4.47	4.55	4.45	2.85
Total	5.23	5.14	5.70	5.00	5.17	5.08	5.48	5.23

See footnotes at end of table.

Table 22. Average Price of Natural Gas Sold to Commercial Consumers, by State, 1997-1999

(Dollars per Thousand Cubic Feet) — Continued

State	1998							
	November	October	September	August	July	June	May	April
Alabama	7.40	6.94	6.80	6.85	7.11	7.11	6.70	6.42
Alaska	2.48	2.33	3.23	2.15	2.08	2.05	2.24	2.32
Arizona	6.44	6.51	5.83	6.36	6.31	6.25	6.20	5.84
Arkansas	5.17	4.91	5.03	5.00	5.30	5.17	5.32	5.20
California	6.08	5.73	5.93	5.98	5.59	6.01	5.77	6.76
Colorado	3.86	3.94	4.59	4.40	4.91	4.84	4.58	4.35
Connecticut	6.79	5.54	5.48	5.57	4.69	5.92	7.08	6.91
Delaware	6.93	8.05	8.72	8.40	8.14	7.81	7.33	6.85
District of Columbia	7.65	7.45	7.32	7.11	6.95	6.94	6.96	7.06
Florida	6.27	6.28	6.12	6.14	6.37	6.48	6.57	6.45
Georgia	3.36	4.95	9.16	9.03	9.51	7.66	8.09	5.70
Hawaii	14.00	14.04	16.65	10.88	13.40	13.53	14.07	14.19
Idaho	4.84	4.92	4.95	4.89	4.91	4.84	4.78	4.77
Illinois	4.88	5.32	6.10	6.41	8.18	6.25	6.84	5.26
Indiana	4.89	5.33	6.19	6.57	6.41	6.10	6.40	6.14
Iowa	4.52	5.15	6.54	6.44	7.71	4.27	5.79	5.32
Kansas	5.10	5.34	5.50	4.30	5.35	5.51	5.61	5.94
Kentucky	5.16	5.78	5.79	5.83	6.34	5.91	5.27	5.60
Louisiana	6.15	6.07	5.79	5.64	5.81	5.55	6.30	5.54
Maine	6.68	6.55	6.89	6.89	6.81	6.70	7.20	7.89
Maryland	6.07	7.71	7.27	7.40	7.89	7.13	7.48	7.06
Massachusetts	7.49	6.06	6.19	6.48	6.24	6.19	6.48	7.54
Michigan	4.70	5.12	5.42	5.78	5.96	5.45	5.28	4.98
Minnesota	4.26	4.22	3.92	4.43	4.65	4.45	4.63	4.52
Mississippi	3.72	4.78	3.85	4.35	4.50	4.48	4.93	5.18
Missouri	5.50	6.17	5.71	6.04	6.01	5.65	5.52	5.40
Montana	5.19	5.68	6.19	6.18	5.78	5.79	5.50	5.01
Nebraska	3.74	3.50	3.31	3.51	3.68	3.67	4.00	4.16
Nevada	6.69	6.99	7.32	7.30	6.43	6.25	6.08	6.09
New Hampshire	7.30	5.94	6.40	6.70	6.59	6.45	5.98	6.18
New Jersey	3.22	3.14	2.98	2.79	3.85	3.61	3.70	4.03
New Mexico	3.42	4.16	4.50	4.70	4.85	6.44	5.16	4.51
New York	5.61	5.40	5.64	4.59	5.49	5.15	6.36	6.55
North Carolina	6.90	6.24	6.27	6.29	6.46	6.17	6.19	6.10
North Dakota	4.35	4.43	4.77	7.34	4.76	4.90	4.58	4.19
Ohio	5.70	6.92	7.03	7.75	6.15	6.26	5.72	5.75
Oklahoma	6.05	5.18	5.22	5.18	5.22	5.08	4.80	4.43
Oregon	4.39	5.48	5.50	5.86	5.71	5.48	5.45	5.16
Pennsylvania	6.70	7.41	8.06	8.32	8.22	8.24	8.50	7.91
Rhode Island	8.11	8.65	9.14	9.35	8.98	8.88	8.37	8.10
South Carolina	6.61	5.76	5.91	5.93	5.91	5.98	5.94	6.42
South Dakota	4.25	4.86	5.67	5.62	6.25	4.34	5.09	4.71
Tennessee	6.34	6.87	5.85	6.27	5.98	5.96	5.89	5.98
Texas	4.27	4.20	4.19	4.06	4.17	3.98	5.21	4.60
Utah	4.68	3.99	4.42	4.80	4.36	3.92	3.92	3.75
Vermont	4.95	4.81	4.63	5.17	4.91	5.30	5.98	5.14
Virginia	6.11	6.33	6.24	6.63	5.91	6.33	5.59	5.74
Washington	5.32	4.77	4.85	4.91	4.90	4.82	4.73	4.68
West Virginia	6.30	6.36	6.29	6.71	7.10	7.03	7.47	6.37
Wisconsin	4.71	3.81	4.12	4.45	4.79	4.34	4.07	4.56
Wyoming	4.65	4.81	4.89	5.95	5.19	5.12	4.87	4.73
Total	5.22	5.31	5.49	5.46	5.64	5.51	5.73	5.64

^R Revised Data.^{NA} Not Available.

Notes: Data for 1998 are final. All other data are preliminary unless otherwise indicated. Geographic coverage is the 50 States and the District of Columbia. Average prices for gas delivered to commercial consumers reflect onsystem sales prices only. See Appendix A, Explanatory Note 5 for

discussion of computations and revision policy. See Table 25 for data on onsystem sales expressed as a percentage of both total commercial and total industrial deliveries.

Source: Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers."

Table 23. Average Price of Natural Gas Sold to Industrial Consumers, by State, 1997-1999

(Dollars per Thousand Cubic Feet)

State	YTD 1999	YTD 1998	YTD 1997	1999				
				November	October	September	August	July
Alabama	3.31	3.28	3.63	3.79	3.39	3.59	3.33	3.06
Alaska	1.23	1.35	1.54	1.34	1.29	1.16	1.33	1.27
Arizona	3.42	3.25	3.63	3.63	3.55	3.48	3.29	3.26
Arkansas	NA	3.45	3.68	3.96	3.86	3.84	3.92	3.64
California	NA	3.71	4.08	4.44	4.02	2.44	3.67	3.48
Colorado	NA	1.56	0.76	NA	NA	NA	NA	NA
Connecticut	4.10	4.32	4.69	4.63	4.16	3.92	3.82	3.54
Delaware	4.18	4.19	4.36	5.25	4.61	4.64	4.25	4.16
District of Columbia	—	—	—	—	—	—	—	—
Florida	3.97	3.99	4.38	4.42	3.86	4.35	4.20	3.99
Georgia	NA	4.06	4.58	NA	NA	NA	NA	4.12
Hawaii	8.20	—	—	8.19	8.29	8.28	8.04	8.04
Idaho	3.27	3.09	2.76	3.51	3.29	3.23	3.22	3.59
Illinois	3.97	3.98	3.95	4.76	5.17	4.56	4.05	4.17
Indiana	NA	4.31	4.29	NA	NA	NA	3.70	3.93
Iowa	3.85	3.44	4.05	4.95	4.63	4.59	3.96	2.30
Kansas	NA	3.17	3.29	3.75	3.39	^R 2.82	^R 2.62	2.52
Kentucky	3.20	4.00	4.11	3.65	3.34	3.36	3.26	2.99
Louisiana	2.26	2.49	2.87	3.04	2.39	2.53	2.41	2.28
Maine	4.76	5.04	5.39	4.92	4.22	3.92	3.80	4.17
Maryland	NA	5.27	3.31	5.45	6.59	6.78	4.48	5.74
Massachusetts	NA	5.60	5.67	NA	NA	NA	NA	NA
Michigan	3.92	3.92	4.03	3.81	4.25	4.51	4.81	5.11
Minnesota	3.02	2.87	3.28	4.29	3.94	3.47	2.68	2.87
Mississippi	NA	3.21	3.55	3.80	3.39	3.63	3.36	3.09
Missouri	NA	4.39	4.58	4.41	4.41	4.13	3.92	3.69
Montana	4.57	4.73	4.79	4.44	5.29	5.71	6.07	5.67
Nebraska	3.37	3.25	3.80	4.10	3.63	3.68	3.50	3.16
Nevada	4.60	4.80	7.77	4.84	4.51	4.83	4.79	4.71
New Hampshire	4.22	4.63	4.71	5.69	3.79	3.78	3.66	3.49
New Jersey	NA	3.03	3.76	NA	NA	NA	NA	NA
New Mexico	NA	3.34	3.30	2.29	NA	NA	NA	3.39
New York	NA	3.95	4.98	4.95	4.95	4.84	NA	NA
North Carolina	3.64	3.95	4.60	4.71	5.60	3.77	3.10	3.03
North Dakota	2.73	2.78	3.04	3.17	3.14	3.24	3.00	2.73
Ohio	NA	4.36	4.93	5.49	5.28	5.11	NA	6.61
Oklahoma	3.59	3.67	4.11	3.96	3.48	3.52	3.32	3.48
Oregon	NA	3.70	3.00	4.19	3.94	4.08	4.01	3.93
Pennsylvania	4.17	4.15	4.60	4.28	4.12	3.97	3.83	3.77
Rhode Island	3.89	3.82	4.27	4.60	4.62	4.19	2.61	3.33
South Carolina	3.30	3.29	3.69	4.08	3.68	3.74	3.45	3.10
South Dakota	3.31	3.31	4.05	3.69	3.76	3.85	3.51	3.53
Tennessee	NA	3.92	4.11	2.79	1.52	2.20	2.77	2.69
Texas	NA	2.31	2.78	3.10	2.84	2.97	2.86	2.53
Utah	2.97	2.98	2.50	3.04	2.90	2.93	2.85	2.85
Vermont	2.99	2.82	3.06	3.56	3.39	3.23	3.02	2.83
Virginia	NA	3.95	4.64	5.83	3.50	NA	4.23	3.39
Washington	NA	2.66	3.16	NA	NA	NA	NA	NA
West Virginia	NA	3.39	2.91	NA	3.25	3.58	3.42	2.84
Wisconsin	3.82	3.78	4.08	4.67	3.60	4.07	3.73	3.30
Wyoming	NA	3.37	3.48	NA	NA	NA	NA	NA
Total	2.98	3.14	3.52	3.45	3.15	3.09	3.03	2.88

See footnotes at end of table.

Table 23. Average Price of Natural Gas Sold to Industrial Consumers, by State, 1997-1999

(Dollars per Thousand Cubic Feet) — Continued

State	1999						1998	
	June	May	April	March	February	January	Total	December
Alabama	3.15	3.30	3.24	3.05	3.34	3.24	3.30	3.59
Alaska	1.24	1.21	1.18	1.17	1.18	1.20	1.34	1.22
Arizona	3.62	3.11	3.26	3.71	3.42	3.48	3.26	3.38
Arkansas	NA	3.57	3.35	3.42	3.48	3.40	3.48	3.78
California	3.34	2.86	3.12	3.09	NA	4.02	3.77	3.70
Colorado	2.41	2.46	2.28	2.16	2.32	2.41	2.61	0.93
Connecticut	3.70	3.70	3.98	4.23	4.39	4.49	4.34	4.55
Delaware	4.11	3.48	4.27	4.00	3.93	4.33	4.13	3.68
District of Columbia	—	—	—	—	—	—	—	—
Florida	4.11	3.92	3.82	3.66	3.92	3.82	3.98	3.74
Georgia	3.46	NA	3.39	2.76	2.64	2.55	3.92	2.18
Hawaii	8.31	8.52	8.02	8.10	8.07	8.41	—	8.64
Idaho	3.21	3.22	3.26	3.14	3.23	3.19	3.09	3.08
Illinois	4.03	3.85	3.17	3.50	3.71	3.81	3.96	3.82
Indiana	3.95	NA	NA	NA	3.01	NA	4.28	4.06
Iowa	6.02	3.52	3.27	3.33	3.52	3.32	3.49	3.57
Kansas	2.51	NA	2.97	2.98	3.25	NA	3.17	3.26
Kentucky	2.90	3.09	2.90	3.10	3.35	3.17	4.00	3.97
Louisiana	2.07	1.98	1.89	1.88	1.95	2.12	2.31	1.65
Maine	4.10	4.61	6.11	5.76	6.05	5.20	5.13	6.13
Maryland	6.00	NA	3.80	4.25	6.65	6.18	5.26	5.22
Massachusetts	NA	4.50	NA	NA	6.88	4.62	5.69	6.45
Michigan	4.46	3.83	3.69	3.76	3.66	3.92	3.91	3.88
Minnesota	2.27	3.07	2.52	2.67	2.81	2.86	2.88	2.96
Mississippi	3.09	3.18	NA	2.65	3.12	NA	3.22	3.32
Missouri	3.91	4.00	3.97	4.00	NA	4.74	4.51	3.83
Montana	5.99	4.33	4.79	4.79	4.78	3.40	4.68	4.21
Nebraska	3.41	3.14	3.05	3.21	3.12	3.35	3.26	3.33
Nevada	4.76	4.62	4.51	4.45	4.50	4.50	4.74	4.59
New Hampshire	3.69	1.79	2.06	6.42	6.73	6.51	4.66	5.08
New Jersey	NA	NA	NA	NA	NA	NA	2.97	2.46
New Mexico	3.35	3.36	NA	3.60	3.58	NA	3.22	0.56
New York	NA	NA	NA	NA	NA	NA	4.02	3.05
North Carolina	3.22	3.07	3.09	3.79	3.60	3.63	3.96	4.13
North Dakota	2.59	2.77	2.37	2.47	2.53	2.66	2.82	3.07
Ohio	5.45	3.45	5.17	4.90	5.13	5.42	4.39	4.65
Oklahoma	3.45	4.73	3.28	3.50	3.50	3.45	3.66	3.43
Oregon	3.94	3.96	3.89	NA	4.37	3.87	3.75	4.23
Pennsylvania	3.80	3.92	4.19	4.41	4.45	4.59	4.15	4.16
Rhode Island	3.29	3.74	3.52	4.32	4.77	5.00	3.82	3.85
South Carolina	3.22	3.07	2.79	2.93	3.15	3.00	3.29	3.31
South Dakota	3.54	3.26	3.02	3.03	3.12	3.13	3.28	3.11
Tennessee	3.31	3.19	NA	3.37	3.54	3.57	3.94	3.26
Texas	2.41	NA	2.14	1.98	2.04	2.12	2.35	2.27
Utah	2.86	2.92	2.99	3.31	3.16	2.85	3.00	3.20
Vermont	2.82	2.80	2.74	2.72	2.75	3.00	2.80	2.61
Virginia	3.49	NA	3.13	3.76	3.88	5.07	4.07	5.16
Washington	NA	NA	NA	NA	NA	NA	2.64	2.51
West Virginia	NA	2.68	NA	NA	2.82	2.40	3.39	3.35
Wisconsin	3.53	3.41	3.86	3.72	3.82	3.90	3.78	3.85
Wyoming	3.20	3.66	4.00	3.83	NA	3.74	3.37	3.38
Total	2.84	2.65	2.79	2.76	2.97	3.07	3.14	2.92

See footnotes at end of table.

Table 23. Average Price of Natural Gas Sold to Industrial Consumers, by State, 1997-1999

(Dollars per Thousand Cubic Feet) — Continued

State	1998							
	November	October	September	August	July	June	May	April
Alabama	3.32	3.28	3.05	3.16	3.22	3.19	3.20	3.49
Alaska	1.22	1.22	1.21	1.22	1.22	1.40	1.43	1.42
Arizona	3.24	2.99	3.09	3.08	3.23	3.37	3.31	3.32
Arkansas	3.33	3.25	3.05	3.10	3.49	3.29	3.38	3.59
California	3.60	2.83	3.38	3.33	3.56	3.53	3.01	4.11
Colorado	1.17	1.22	0.78	1.39	1.51	1.49	1.55	1.67
Connecticut	4.22	3.88	3.48	3.66	3.63	3.72	4.16	4.58
Delaware	3.79	3.70	4.33	5.05	4.26	4.29	4.26	4.56
District of Columbia	—	—	—	—	—	—	—	—
Florida	3.94	3.91	3.53	3.67	4.04	3.89	4.07	4.31
Georgia	2.55	3.20	3.71	4.09	3.07	4.08	4.45	4.16
Hawaii	—	—	—	—	—	—	—	—
Idaho	3.16	3.02	2.94	3.32	2.97	3.10	3.09	3.10
Illinois	3.63	3.34	3.73	4.41	3.12	4.52	4.21	4.04
Indiana	3.84	3.34	3.86	5.45	4.98	3.69	4.45	4.85
Iowa	3.83	3.71	3.61	3.29	4.45	2.45	4.54	3.24
Kansas	3.17	2.86	2.45	2.82	2.94	3.20	3.48	3.73
Kentucky	3.42	3.94	3.89	3.94	3.83	3.72	3.49	4.20
Louisiana	2.35	2.30	2.04	2.19	2.54	2.68	2.89	2.46
Maine	4.97	4.26	3.96	3.84	4.21	4.14	4.75	6.19
Maryland	4.74	4.14	5.76	4.48	8.08	5.37	4.53	5.24
Massachusetts	5.60	4.23	4.13	4.26	4.72	4.76	4.54	5.89
Michigan	3.53	4.20	4.58	5.10	4.67	4.23	3.93	3.73
Minnesota	2.77	2.63	2.64	2.86	2.79	2.54	2.97	3.01
Mississippi	2.77	3.05	3.09	3.06	3.41	3.10	3.31	3.37
Missouri	4.28	4.02	4.13	4.07	3.93	4.30	4.27	4.10
Montana	4.64	4.84	9.73	6.61	5.96	5.63	5.15	4.56
Nebraska	3.31	2.89	2.59	2.75	3.27	3.37	3.37	3.38
Nevada	4.53	4.39	4.35	4.46	5.86	5.81	5.94	5.84
New Hampshire	4.98	2.89	3.79	3.63	3.67	3.47	4.00	4.10
New Jersey	2.58	2.50	2.47	2.50	3.14	3.18	3.40	3.32
New Mexico	2.69	2.77	3.17	3.33	3.22	3.72	3.79	4.19
New York	3.02	2.64	2.44	2.55	2.82	2.55	3.21	3.21
North Carolina	3.91	3.64	3.56	3.63	3.61	3.58	3.69	3.64
North Dakota	2.58	2.45	2.06	2.47	2.79	2.54	3.08	3.03
Ohio	3.69	4.66	4.64	6.02	4.73	4.19	4.18	4.20
Oklahoma	3.33	3.58	3.34	3.38	3.35	3.37	3.06	3.28
Oregon	3.48	3.94	3.55	3.72	3.78	3.80	3.72	3.70
Pennsylvania	3.99	3.83	3.91	3.74	3.83	3.97	3.95	4.28
Rhode Island	3.68	3.93	3.08	2.98	3.59	3.58	3.75	4.04
South Carolina	3.22	3.16	2.95	2.50	3.43	3.25	3.37	3.48
South Dakota	3.13	3.27	3.44	3.29	3.22	3.55	3.49	3.38
Tennessee	4.07	3.44	3.54	3.49	4.51	3.62	3.71	3.78
Texas	2.16	2.12	1.85	2.13	2.50	2.21	2.42	2.45
Utah	3.15	2.94	2.99	3.26	3.11	2.70	2.82	2.87
Vermont	2.30	2.84	2.74	2.77	2.78	2.78	2.87	2.86
Virginia	4.34	3.75	3.24	3.22	3.95	3.56	3.24	3.02
Washington	2.44	2.35	2.39	2.60	2.51	2.84	4.02	2.86
West Virginia	3.30	3.62	3.42	3.46	3.51	3.40	3.21	3.47
Wisconsin	3.90	3.25	2.98	3.44	3.65	3.33	3.57	4.08
Wyoming	3.37	3.29	3.32	3.36	3.35	3.32	3.50	3.38
Total	2.95	2.75	2.65	2.75	3.04	2.97	3.14	3.28

^R Revised Data.^{NA} Not Available.

— Not Applicable.

Notes: Data for 1998 are final. All other data are preliminary unless otherwise indicated. Geographic coverage is the 50 States and the District of Columbia. Average prices for gas delivered to industrial consumers

reflect onsystem sales prices only. See Appendix A, Explanatory Note 5 for discussion of computations and revision policy. See Table 25 for data on onsystem sales expressed as a percentage of both total commercial and total industrial deliveries.

Source: Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers."

Table 24. Average Price of Natural Gas Delivered to Electric Utility^a Consumers, by State, 1997-1999

(Dollars per Thousand Cubic Feet)

State	YTD 1999	YTD 1998	YTD 1997	1999				
				October	September	August	July	June
Alabama	2.78	2.55	2.73	3.95	3.64	2.28	3.26	2.73
Alaska	1.59	1.82	1.72	1.48	1.40	1.50	1.62	1.59
Arizona	2.65	2.40	2.98	2.96	3.03	2.84	2.56	2.62
Arkansas	2.60	2.28	2.59	2.90	3.06	2.96	2.58	2.49
California	2.73	2.77	3.05	2.98	3.19	3.00	2.71	2.57
Colorado	2.61	2.83	3.18	3.13	2.94	2.52	2.53	3.18
Connecticut	2.66	2.42	2.47	3.02	2.88	2.65	2.59	2.52
Delaware	2.87	2.80	3.12	3.34	3.35	3.06	2.72	2.71
District of Columbia	—	—	—	—	—	—	—	—
Florida	2.44	2.33	2.50	3.22	2.52	2.43	2.13	2.36
Georgia	2.54	3.21	2.73	3.13	2.62	2.66	2.60	2.47
Hawaii	—	—	—	—	—	—	—	—
Idaho	—	—	—	—	—	—	—	—
Illinois	2.41	2.25	2.47	3.15	2.86	2.72	2.48	2.44
Indiana	2.95	2.87	3.21	4.56	4.04	2.86	2.82	2.79
Iowa	3.07	2.98	3.23	3.54	3.52	2.94	2.93	2.97
Kansas	2.35	2.12	2.34	2.81	2.73	2.60	2.31	2.35
Kentucky	3.16	3.11	3.24	3.45	3.33	3.26	2.88	3.15
Louisiana	2.56	2.39	2.75	2.87	3.07	2.92	2.55	2.52
Maine	—	—	—	—	—	—	—	—
Maryland	3.08	2.75	2.92	3.25	3.29	3.44	2.98	2.88
Massachusetts	2.69	2.81	3.03	3.10	2.99	2.99	2.73	2.75
Michigan	1.52	1.23	0.79	0.96	1.19	1.67	1.92	1.79
Minnesota	2.51	2.40	2.50	3.52	3.08	1.93	2.60	2.48
Mississippi	2.46	2.34	2.70	2.82	2.79	2.79	2.43	2.43
Missouri	2.63	2.22	2.63	3.06	2.81	2.91	2.54	2.48
Montana	4.25	3.99	7.88	2.48	5.15	6.14	4.20	4.40
Nebraska	2.70	2.36	2.50	2.89	3.05	3.24	2.59	2.63
Nevada	2.47	2.39	2.14	2.68	2.78	2.49	2.43	2.46
New Hampshire	2.87	—	2.71	—	3.02	3.02	2.43	2.44
New Jersey	3.06	2.73	3.01	3.35	3.24	3.37	2.97	2.88
New Mexico	2.30	2.22	2.61	2.58	2.69	2.68	2.30	2.31
New York	2.80	2.56	2.79	3.28	3.20	3.05	2.80	2.72
North Carolina	2.84	2.72	3.15	3.61	3.11	3.09	2.56	2.70
North Dakota	—	—	3.81	—	—	—	—	—
Ohio	2.99	3.48	3.62	3.11	2.91	2.98	3.31	2.99
Oklahoma	2.71	2.48	2.88	3.15	3.18	2.94	2.65	2.59
Oregon	1.88	1.44	1.50	2.00	1.83	1.66	1.78	1.99
Pennsylvania	3.00	3.15	2.80	3.09	2.95	3.12	3.40	2.29
Rhode Island	—	3.38	3.28	—	—	—	—	—
South Carolina	3.63	3.60	4.15	3.84	3.99	3.85	3.47	3.70
South Dakota	—	1.77	—	—	—	—	—	—
Tennessee	—	—	—	—	—	—	—	—
Texas	2.48	2.31	2.64	2.76	2.88	2.83	2.44	2.40
Utah	2.60	2.06	2.11	3.12	2.85	2.67	2.39	2.43
Vermont	3.22	2.90	3.16	2.17	3.25	3.31	—	2.94
Virginia	3.13	2.98	2.96	4.29	3.35	3.42	2.78	3.39
Washington	—	2.79	5.56	—	—	—	—	—
West Virginia	2.98	3.64	3.91	2.88	2.91	2.93	3.13	3.08
Wisconsin	2.91	2.68	3.01	3.29	3.45	2.99	2.90	2.80
Wyoming	4.18	8.44	12.40	3.95	5.75	4.59	3.14	2.60
Total	2.53	2.38	2.70	2.83	2.86	2.80	2.52	2.47

See footnotes at end of table.

Table 24. Average Price of Natural Gas Delivered to Electric Utility^a Consumers, by State, 1997-1999

(Dollars per Thousand Cubic Feet) — Continued

State	1999					1998		
	May	April	March	February	January	Total	December	November
Alabama	2.70	2.52	2.25	2.07	2.22	2.58	2.68	2.47
Alaska	1.61	1.60	1.72	1.70	1.68	1.80	1.72	1.74
Arizona	2.67	2.22	2.13	2.29	2.32	2.42	2.38	2.77
Arkansas	2.52	2.22	1.88	1.94	2.04	2.29	2.35	—
California	2.72	2.42	2.75	2.55	2.70	2.79	2.96	2.86
Colorado	2.60	2.25	2.18	2.24	3.26	2.98	3.33	3.15
Connecticut	2.50	2.54	2.12	2.02	2.11	2.44	1.90	2.45
Delaware	2.53	2.46	2.46	2.98	3.34	2.89	3.34	3.24
District of Columbia	—	—	—	—	—	—	—	—
Florida	2.37	2.31	2.01	2.86	2.08	2.27	1.39	2.30
Georgia	2.58	2.13	1.37	2.15	4.83	3.21	2.11	2.67
Hawaii	—	—	—	—	—	—	—	—
Idaho	—	—	—	—	—	—	—	—
Illinois	2.36	2.20	1.86	1.81	2.27	2.25	2.12	2.31
Indiana	3.19	3.14	2.71	2.78	2.99	2.88	3.36	2.86
Iowa	3.01	2.77	3.13	3.45	3.62	3.07	3.38	3.11
Kansas	2.35	2.08	1.80	1.96	2.24	2.14	2.21	2.25
Kentucky	5.12	3.77	3.33	2.99	2.51	3.40	2.90	3.11
Louisiana	2.58	2.25	2.01	2.08	2.13	2.37	2.16	2.32
Maine	—	—	—	—	—	—	—	—
Maryland	3.27	2.55	2.60	3.46	3.52	2.75	2.64	3.85
Massachusetts	2.58	2.26	2.10	2.13	2.43	2.78	2.26	2.44
Michigan	1.74	1.09	0.88	1.33	2.07	1.24	1.25	1.10
Minnesota	2.32	2.31	2.56	3.49	3.02	2.36	3.43	2.69
Mississippi	2.45	2.30	1.91	1.95	2.05	2.31	1.97	2.28
Missouri	2.41	2.31	2.16	2.29	2.34	2.26	2.31	2.32
Montana	10.99	5.69	7.37	5.20	2.04	2.06	1.48	1.37
Nebraska	2.72	2.46	1.37	2.79	2.28	2.40	2.92	2.81
Nevada	2.43	2.55	2.07	2.40	2.20	2.38	2.01	2.61
New Hampshire	—	—	—	—	—	—	—	—
New Jersey	2.85	2.94	2.46	2.76	2.95	2.74	2.44	3.11
New Mexico	2.22	2.05	1.79	1.89	2.03	2.22	2.14	2.34
New York	2.71	2.49	2.37	2.55	2.80	2.57	2.43	2.80
North Carolina	2.71	3.31	3.32	3.33	3.34	2.81	3.93	3.59
North Dakota	—	—	—	—	—	—	—	—
Ohio	2.42	2.06	2.99	3.32	3.88	3.24	3.88	4.36
Oklahoma	2.66	2.58	2.28	2.48	2.32	2.48	2.28	2.50
Oregon	1.91	1.79	1.67	1.83	2.01	1.56	1.92	1.88
Pennsylvania	3.18	2.55	3.02	2.98	2.94	3.26	4.88	6.91
Rhode Island	—	—	—	—	—	3.38	—	—
South Carolina	3.46	2.94	3.02	2.86	3.00	3.62	4.05	3.71
South Dakota	—	—	—	—	—	1.77	—	—
Tennessee	—	—	—	—	—	—	—	—
Texas	2.44	2.17	1.99	2.09	2.10	2.30	2.24	2.25
Utah	2.36	2.36	2.56	2.19	2.24	2.11	2.45	2.42
Vermont	3.03	2.56	2.44	2.47	2.55	2.90	2.87	2.84
Virginia	2.89	2.79	3.09	3.12	3.18	3.10	4.03	3.72
Washington	—	—	—	—	—	3.44	—	—
West Virginia	2.81	3.12	2.96	2.93	3.19	3.29	3.02	3.25
Wisconsin	2.92	2.63	2.51	2.79	2.64	2.67	2.73	2.63
Wyoming	6.59	13.06	6.02	4.83	6.92	8.31	11.18	14.27
Total	2.48	2.25	2.11	2.27	2.25	2.40	2.22	2.37

See footnotes at end of table.

Table 24. Average Price of Natural Gas Delivered to Electric Utility^a Consumers, by State, 1997-1999

(Dollars per Thousand Cubic Feet) — Continued

State	1998							
	October	September	August	July	June	May	April	March
Alabama	2.62	2.46	2.50	2.63	2.49	2.62	2.69	2.55
Alaska	1.72	1.73	1.76	1.80	1.87	1.84	1.84	1.85
Arizona	2.11	2.33	2.28	2.41	2.79	3.20	2.82	3.07
Arkansas	2.25	2.15	2.05	2.49	2.33	2.33	2.56	2.36
California	2.56	2.50	2.83	2.92	2.70	2.94	2.71	2.85
Colorado	2.71	2.82	3.31	2.77	2.83	2.56	2.53	2.61
Connecticut	2.07	2.22	2.34	2.46	2.38	2.56	2.70	2.79
Delaware	2.66	2.41	2.66	3.47	3.27	1.34	1.41	4.15
District of Columbia	—	—	—	—	—	—	—	—
Florida	2.30	2.18	2.18	2.27	2.31	2.31	2.68	2.64
Georgia	3.80	4.00	2.82	3.18	2.91	3.72	1.94	1.72
Hawaii	—	—	—	—	—	—	—	—
Idaho	—	—	—	—	—	—	—	—
Illinois	2.20	2.01	1.95	2.27	2.37	2.37	2.55	2.34
Indiana	3.23	2.74	2.58	2.80	2.95	2.98	3.37	3.25
Iowa	2.93	2.91	2.80	3.01	2.86	3.16	3.14	3.35
Kansas	2.03	1.87	1.99	2.28	2.14	2.20	2.40	2.36
Kentucky	2.85	2.42	2.43	2.86	3.68	3.59	5.25	4.04
Louisiana	2.25	2.12	2.17	2.59	2.40	2.52	2.66	2.51
Maine	—	—	—	—	—	—	—	—
Maryland	3.13	2.53	2.49	2.84	2.93	2.96	3.33	3.18
Massachusetts	2.28	2.13	2.35	2.62	2.24	2.86	3.66	3.64
Michigan	1.46	1.67	1.38	1.34	1.29	1.20	1.35	0.75
Minnesota	2.32	2.00	2.41	2.48	2.42	2.74	2.76	2.83
Mississippi	2.21	2.16	2.16	2.47	2.36	2.41	2.56	2.46
Missouri	2.14	2.13	1.95	2.39	2.41	2.31	2.56	2.52
Montana	1.30	1.02	4.99	2.47	2.59	5.34	1.40	12.33
Nebraska	2.10	1.93	2.49	2.62	2.37	2.40	1.98	2.72
Nevada	2.33	2.42	2.42	2.34	2.73	2.44	2.31	2.02
New Hampshire	—	—	—	—	—	—	—	—
New Jersey	2.74	2.56	2.46	2.92	2.73	2.77	3.05	2.88
New Mexico	2.02	1.90	2.03	2.32	2.20	2.33	2.41	2.39
New York	2.30	2.21	2.29	2.63	2.51	2.64	2.87	2.96
North Carolina	3.00	2.53	2.55	2.92	2.78	2.89	3.37	4.03
North Dakota	—	—	—	—	—	—	—	—
Ohio	3.88	4.09	3.93	2.98	2.79	3.06	4.01	4.14
Oklahoma	2.41	2.16	2.07	2.52	2.41	2.52	2.88	2.62
Oregon	1.63	1.48	1.56	1.46	1.31	1.50	1.36	1.23
Pennsylvania	2.50	3.74	2.63	3.18	2.32	5.37	5.94	2.69
Rhode Island	—	—	3.40	3.38	3.40	3.43	3.45	3.19
South Carolina	3.21	3.37	3.53	3.58	3.92	3.41	3.44	3.58
South Dakota	—	1.77	—	—	—	—	—	—
Tennessee	—	—	—	—	—	—	—	—
Texas	2.16	2.05	2.11	2.46	2.34	2.38	2.52	2.43
Utah	2.20	1.95	2.04	2.15	1.94	—	—	—
Vermont	2.86	2.54	2.67	3.09	2.81	3.03	3.08	2.81
Virginia	3.09	2.76	2.60	3.02	2.93	2.99	4.46	3.34
Washington	—	—	—	—	—	—	5.59	3.86
West Virginia	1.20	2.94	3.85	6.31	2.62	3.58	—	—
Wisconsin	2.42	2.31	2.49	2.80	2.64	2.95	3.13	2.75
Wyoming	5.33	6.64	67.70	8.23	7.66	11.70	4.77	10.42
Total	2.22	2.15	2.21	2.50	2.40	2.47	2.59	2.53

^a Includes all steam electric utility generating plants with a combined capacity of 50 megawatts or greater.

— Not Applicable.

Notes: Data for 1998 are final. All other data are preliminary unless otherwise indicated. Geographic coverage is the 50 States and the District

of Columbia. See Appendix A, Explanatory Note 5 for discussion of computations and revision policy.

Sources: Form FERC-423, "Monthly Report of Cost and Quality of Fuels for Electric Plants," and Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition."

Table 25. Percentage of Total Deliveries Represented by Onsystem Sales, by State, 1997-1999

State	YTD 1999		YTD 1998		YTD 1997		1999	
	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial	November	
							Commercial	Industrial
Alabama	64.6	15.1	81.0	23.5	62.5	24.6	51.5	14.3
Alaska	55.8	99.3	49.7	99.3	54.5	97.8	61.9	97.6
Arizona	82.8	36.6	85.1	33.4	84.4	25.1	81.8	46.3
Arkansas	NA	NA	91.1	9.1	94.0	10.5	NA	10.3
California	55.4	8.8	48.6	9.4	49.9	8.9	52.8	7.6
Colorado	NA	NA	94.2	12.7	92.7	23.6	NA	NA
Connecticut	63.9	56.4	69.5	55.3	82.7	66.4	58.3	53.2
Delaware	100.0	16.3	100.0	22.2	100.0	31.0	100.0	13.4
District of Columbia	NA	—	51.6	—	54.8	—	43.8	—
Florida	91.8	3.2	96.7	7.0	97.6	10.0	87.2	2.8
Georgia	NA	NA	84.1	25.6	88.8	26.7	NA	NA
Hawaii	100.0	100.0	100.0	—	100.0	—	100.0	100.0
Idaho	86.0	2.7	86.4	2.5	85.9	2.0	82.5	2.5
Illinois	41.5	8.1	47.8	9.0	54.6	11.5	38.3	8.4
Indiana	NA	NA	78.7	9.3	89.2	16.0	NA	NA
Iowa	83.1	7.3	85.2	6.6	88.0	8.6	82.9	7.2
Kansas	NA	NA	70.5	10.2	69.9	9.2	52.7	7.7
Kentucky	85.6	16.4	87.3	17.2	89.8	19.2	84.7	15.6
Louisiana	96.3	7.6	94.9	8.1	95.8	10.1	96.2	9.3
Maine	100.0	86.5	100.0	87.7	100.0	91.4	100.0	87.1
Maryland	NA	NA	36.5	6.6	69.2	7.4	28.6	6.9
Massachusetts	NA	NA	56.0	13.2	61.9	20.2	NA	NA
Michigan	57.5	8.2	59.0	8.1	63.4	9.0	56.3	8.7
Minnesota	95.5	37.8	97.8	39.6	98.9	40.4	91.9	40.3
Mississippi	NA	NA	94.7	37.5	94.8	39.6	95.0	34.1
Missouri	76.9	17.5	78.2	18.2	79.4	21.8	70.9	16.1
Montana	80.3	1.6	77.2	1.5	91.4	3.1	82.0	2.6
Nebraska	64.0	19.6	75.8	12.2	73.8	27.0	69.0	23.7
Nevada	57.8	8.2	70.3	4.5	71.0	1.8	56.3	24.5
New Hampshire	NA	25.4	94.0	31.3	92.2	48.8	93.4	26.2
New Jersey	NA	NA	60.6	47.1	56.9	47.0	NA	NA
New Mexico	NA	NA	64.8	10.3	69.6	9.5	72.5	19.0
New York	NA	NA	52.7	5.7	64.2	8.5	NA	26.7
North Carolina	80.5	48.8	90.7	32.1	94.2	45.5	98.7	55.4
North Dakota	NA	13.4	83.3	14.2	89.5	18.5	NA	12.7
Ohio	NA	NA	55.7	4.2	65.2	5.7	36.9	1.7
Oklahoma	72.8	4.2	73.4	3.5	81.8	4.7	71.7	4.0
Oregon	98.8	NA	99.0	14.3	98.5	16.3	99.0	12.0
Pennsylvania	55.6	11.1	56.5	13.0	63.5	14.2	52.6	11.3
Rhode Island	51.6	6.8	60.1	7.3	82.6	17.4	34.9	27.4
South Carolina	92.5	83.4	98.0	86.7	98.9	86.9	100.0	88.4
South Dakota	80.8	36.5	84.1	34.4	82.9	24.1	80.4	37.5
Tennessee	NA	NA	87.1	33.1	92.0	38.3	89.7	36.3
Texas	75.5	NA	80.6	14.2	60.5	17.3	69.4	18.6
Utah	82.1	10.1	82.0	8.5	82.6	8.9	82.8	11.4
Vermont	100.0	75.3	100.0	100.0	100.0	100.0	100.0	77.1
Virginia	NA	NA	71.6	12.6	79.0	13.0	65.7	12.3
Washington	NA	NA	86.6	19.6	82.5	23.5	NA	NA
West Virginia	NA	NA	48.7	6.2	53.9	12.2	47.0	NA
Wisconsin	72.1	20.3	73.1	21.7	81.9	27.1	73.9	20.1
Wyoming	NA	NA	89.0	2.0	82.8	2.5	NA	NA
Total	64.9	16.7	66.8	15.3	70.5	17.7	63.7	17.8

See footnotes at end of table.

Table 25. Percentage of Total Deliveries Represented by Onsystem Sales, by State, 1997-1999 — Continued

State	1999							
	October		September		August		July	
	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial
Alabama	45.0	14.1	48.8	14.4	47.0	14.2	50.9	14.7
Alaska	54.8	97.4	56.7	100.0	55.9	99.9	56.3	98.4
Arizona	79.0	39.0	78.6	40.8	78.7	34.1	83.0	43.0
Arkansas	NA	10.1	NA	8.9	86.7	8.2	83.6	7.9
California	53.9	8.0	49.9	10.6	37.8	7.5	52.6	8.8
Colorado	NA	NA	NA	NA	NA	NA	NA	NA
Connecticut	56.5	54.5	74.5	59.3	51.6	54.7	55.4	54.7
Delaware	100.0	9.1	100.0	10.1	100.0	12.7	100.0	12.3
District of Columbia	36.8	—	32.4	—	31.7	—	NA	—
Florida	^R 91.5	2.8	94.7	2.4	93.9	2.8	94.7	2.7
Georgia	NA	NA	NA	NA	NA	NA	55.3	11.0
Hawaii	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Idaho	79.0	2.1	80.4	2.1	82.0	3.4	83.7	2.8
Illinois	38.6	6.3	34.5	7.2	24.5	5.1	26.3	5.3
Indiana	NA	NA	NA	NA	NA	9.7	62.4	8.1
Iowa	79.4	7.3	71.6	7.2	75.0	7.1	72.2	7.1
Kansas	59.5	10.0	64.4	^R 14.5	53.7	^R 14.9	52.3	12.4
Kentucky	83.0	18.1	82.6	15.7	66.3	16.9	79.7	16.1
Louisiana	96.2	7.9	96.1	8.3	96.4	7.9	96.1	7.3
Maine	100.0	86.8	100.0	87.1	100.0	85.7	100.0	84.1
Maryland	^R 25.5	4.5	20.5	4.2	19.6	4.0	NA	3.9
Massachusetts	NA	NA	NA	NA	NA	NA	NA	NA
Michigan	48.7	5.9	40.1	4.9	32.0	4.4	37.5	4.5
Minnesota	98.1	44.5	96.3	37.4	89.4	34.3	96.7	36.7
Mississippi	93.5	33.2	94.0	34.5	93.8	33.0	94.1	33.4
Missouri	69.3	12.9	64.7	12.7	65.5	11.7	47.4	11.0
Montana	80.3	1.5	75.3	0.8	68.5	0.5	70.1	1.0
Nebraska	78.4	17.2	60.2	12.3	86.4	12.5	68.6	9.0
Nevada	54.6	24.5	50.2	16.8	35.0	17.1	33.0	18.1
New Hampshire	90.6	28.5	89.6	27.5	80.6	26.3	86.6	26.3
New Jersey	NA	NA	NA	NA	NA	NA	NA	NA
New Mexico	NA	NA	NA	NA	NA	NA	27.3	5.7
New York	NA	27.8	NA	29.0	NA	NA	NA	NA
North Carolina	84.1	39.8	99.2	63.7	87.0	48.9	87.4	56.1
North Dakota	88.9	26.5	82.6	12.0	77.9	11.6	79.6	10.9
Ohio	36.5	1.5	31.6	1.0	NA	NA	30.8	0.6
Oklahoma	63.8	3.4	58.5	3.8	60.6	3.5	57.6	3.4
Oregon	98.2	12.0	98.3	12.2	98.5	2.7	98.8	12.2
Pennsylvania	46.9	9.9	49.2	9.3	45.2	9.4	53.6	10.7
Rhode Island	43.6	26.8	39.9	24.7	16.4	36.2	44.1	28.7
South Carolina	93.4	82.3	99.9	88.1	94.6	81.7	94.7	87.0
South Dakota	75.6	25.5	71.5	26.2	69.8	20.3	73.9	20.7
Tennessee	78.7	49.7	70.8	34.8	76.1	26.7	74.1	28.3
Texas	72.3	12.6	72.8	17.1	74.4	33.3	72.5	25.4
Utah	79.9	11.0	75.4	9.8	74.4	9.2	76.0	8.7
Vermont	100.0	75.2	100.0	69.8	100.0	66.5	100.0	68.6
Virginia	61.2	11.8	59.3	NA	57.7	4.4	62.5	7.9
Washington	NA	NA	NA	NA	NA	NA	NA	NA
West Virginia	39.6	13.0	35.1	12.8	NA	12.4	33.9	30.2
Wisconsin	71.6	20.7	60.9	16.2	53.5	15.8	47.7	18.8
Wyoming	84.1	NA	85.9	NA	73.9	NA	84.3	NA
Total	^R 60.7	15.9	58.1	17.0	53.6	17.9	56.8	17.6

See footnotes at end of table.

Table 25. Percentage of Total Deliveries Represented by Onsystem Sales, by State, 1997-1999 — Continued

State	1999							
	June		May		April		March	
	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial
Alabama	53.4	15.3	67.4	15.0	76.0	15.2	76.3	15.9
Alaska	57.4	100.0	58.9	99.9	53.5	99.9	57.5	99.9
Arizona	82.1	37.2	82.5	42.3	82.5	30.5	84.6	26.3
Arkansas	NA	NA	NA	8.6	89.6	8.7	90.1	9.6
California	60.7	10.1	49.8	12.7	61.3	12.7	59.5	13.4
Colorado	95.8	0.6	96.7	0.6	NA	0.8	96.7	0.4
Connecticut	56.8	62.3	53.6	55.2	72.9	64.0	67.4	58.6
Delaware	100.0	16.4	100.0	22.4	100.0	17.6	100.0	22.7
District of Columbia	33.9	—	39.4	—	43.5	—	53.8	—
Florida	96.3	3.2	91.6	4.2	92.0	3.4	90.2	4.2
Georgia	60.0	10.9	NA	NA	82.0	6.0	83.0	13.5
Hawaii	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Idaho	83.3	2.8	85.5	2.3	87.0	2.6	87.8	2.8
Illinois	33.7	6.7	34.9	6.6	40.9	10.3	47.7	9.1
Indiana	NA	8.0	NA	NA	NA	NA	NA	NA
Iowa	76.4	5.9	93.5	5.9	77.2	6.2	87.3	7.5
Kansas	55.9	6.6	68.4	NA	69.1	4.9	NA	5.0
Kentucky	80.4	12.9	84.4	16.5	83.9	16.3	88.8	16.6
Louisiana	97.1	6.7	96.6	6.4	97.2	7.0	96.2	7.5
Maine	100.0	87.9	100.0	84.4	100.0	75.1	100.0	80.7
Maryland	19.8	4.9	NA	NA	25.1	1.6	NA	9.5
Massachusetts	44.2	NA	54.1	41.5	46.8	NA	67.0	NA
Michigan	39.5	4.9	47.1	7.2	58.0	14.2	63.3	16.2
Minnesota	92.1	47.2	96.6	29.3	91.7	37.1	96.5	39.3
Mississippi	94.4	35.2	95.8	38.1	NA	NA	88.4	34.9
Missouri	71.0	13.6	75.8	14.0	81.4	17.2	83.3	24.6
Montana	67.9	0.4	92.8	1.7	77.3	1.7	78.1	1.8
Nebraska	63.2	18.1	^R 49.5	22.4	65.0	64.6	67.6	23.8
Nevada	55.6	18.7	60.2	18.7	63.2	25.4	67.7	28.0
New Hampshire	89.1	23.2	NA	26.2	94.2	27.2	94.5	19.6
New Jersey	NA	NA	NA	NA	NA	NA	NA	NA
New Mexico	28.9	5.9	27.2	4.9	40.8	NA	58.1	4.2
New York	NA	NA	NA	NA	NA	NA	NA	NA
North Carolina	88.0	49.9	89.9	50.0	90.7	42.0	55.1	44.4
North Dakota	77.0	16.4	85.3	6.0	86.8	14.5	89.7	13.7
Ohio	30.1	1.1	34.5	1.8	38.7	2.0	48.5	3.6
Oklahoma	24.2	4.0	68.1	3.8	75.7	4.3	79.2	5.0
Oregon	98.5	14.1	98.7	14.1	98.7	15.1	98.7	NA
Pennsylvania	50.3	11.0	59.1	11.8	56.1	11.1	61.4	12.5
Rhode Island	46.8	32.0	48.9	31.4	56.2	38.8	60.4	50.1
South Carolina	94.9	81.2	95.4	86.1	85.3	72.8	78.0	83.3
South Dakota	60.2	33.2	78.7	38.8	83.2	41.8	84.3	47.4
Tennessee	58.7	27.0	77.6	26.4	NA	NA	83.9	22.5
Texas	72.4	21.4	74.4	NA	75.7	20.5	78.2	16.3
Utah	72.9	14.8	80.1	8.7	83.0	8.0	82.8	8.3
Vermont	100.0	68.7	100.0	68.8	100.0	76.3	100.0	82.2
Virginia	56.6	5.3	NA	NA	55.7	7.4	65.8	15.2
Washington	NA	NA	NA	NA	NA	NA	NA	NA
West Virginia	NA	NA	35.8	11.8	51.4	NA	54.2	NA
Wisconsin	51.4	19.9	62.8	18.3	70.9	21.3	76.6	21.9
Wyoming	83.8	3.2	87.5	3.5	88.6	2.4	88.1	2.9
Total	58.9	16.9	^R 61.0	17.0	64.4	15.8	67.9	16.6

See footnotes at end of table.

Table 25. Percentage of Total Deliveries Represented by Onsystem Sales, by State, 1997-1999 — Continued

State	1999				1998			
	February		January		Total		December	
	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial
Alabama	77.4	16.1	81.0	18.4	80.5	23.3	75.4	20.5
Alaska	53.8	99.9	59.8	99.9	49.6	99.4	48.8	100.0
Arizona	84.6	34.0	86.3	32.3	85.0	33.5	84.0	33.6
Arkansas	91.4	10.6	93.3	11.7	90.8	9.5	89.0	9.0
California	59.1	14.4	62.3	11.8	48.9	10.4	49.2	11.1
Colorado	93.2	0.3	97.1	0.1	94.3	7.6	95.2	3.3
Connecticut	69.7	67.0	69.6	60.4	68.7	55.8	62.6	61.5
Delaware	100.0	24.0	100.0	18.1	100.0	22.4	100.0	24.8
District of Columbia	52.4	—	58.2	—	52.3	—	59.7	—
Florida	90.9	4.0	91.5	3.6	96.6	7.3	96.0	6.4
Georgia	81.6	11.3	85.4	10.1	83.6	25.3	79.2	22.2
Hawaii	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Idaho	88.8	3.1	89.4	3.6	86.4	2.6	86.1	3.6
Illinois	46.1	10.0	46.9	10.9	47.4	9.3	45.2	12.3
Indiana	79.3	9.2	79.9	NA	79.2	9.3	82.6	8.6
Iowa	84.7	8.0	86.7	9.2	85.8	6.8	89.4	10.0
Kansas	NA	5.4	NA	NA	69.5	9.9	61.0	5.7
Kentucky	89.2	18.0	90.3	16.9	87.5	17.8	88.6	23.6
Louisiana	95.9	7.8	96.2	7.5	94.6	9.3	92.2	20.6
Maine	100.0	97.3	100.0	93.8	100.0	87.4	100.0	84.4
Maryland	NA	6.5	39.3	7.5	36.7	7.0	37.7	10.3
Massachusetts	NA	32.3	78.5	28.3	57.9	26.3	82.1	25.7
Michigan	64.5	17.3	67.3	16.2	59.7	10.8	64.7	12.0
Minnesota	96.5	33.8	96.6	37.9	97.6	39.7	96.8	39.9
Mississippi	96.9	38.2	NA	NA	94.8	37.6	96.3	38.6
Missouri	79.1	33.9	85.5	26.3	78.3	18.2	79.2	21.9
Montana	80.1	1.7	83.5	2.4	77.1	1.5	77.0	1.5
Nebraska	63.5	28.7	59.8	23.5	72.5	12.7	51.5	20.6
Nevada	69.2	30.9	72.6	31.4	70.3	15.5	69.9	33.2
New Hampshire	95.3	24.1	95.5	24.2	94.1	30.7	95.3	24.4
New Jersey	NA	NA	NA	NA	60.5	49.5	59.7	59.4
New Mexico	52.8	3.6	66.7	NA	67.0	9.8	79.0	4.6
New York	NA	NA	NA	NA	53.2	8.3	56.7	12.0
North Carolina	73.8	43.2	97.0	41.1	90.6	32.1	90.2	32.7
North Dakota	83.6	13.6	92.4	18.4	83.8	14.6	87.2	18.5
Ohio	47.1	3.6	57.0	4.1	55.1	4.3	50.3	5.2
Oklahoma	78.9	5.1	83.2	5.7	73.2	3.6	71.3	4.9
Oregon	99.0	15.8	99.1	16.9	99.0	14.3	99.1	14.4
Pennsylvania	56.4	11.1	66.5	14.6	56.9	13.1	59.0	13.2
Rhode Island	61.5	30.8	59.4	24.4	59.3	7.4	52.5	7.6
South Carolina	97.8	83.0	97.6	84.8	97.9	86.7	97.1	86.5
South Dakota	84.1	50.0	86.6	51.8	84.2	35.6	84.6	46.5
Tennessee	84.8	23.3	89.7	25.4	87.3	33.1	89.5	33.6
Texas	81.3	13.0	71.0	13.8	81.0	14.1	83.4	12.7
Utah	85.7	10.8	85.8	12.2	82.5	8.6	85.2	9.7
Vermont	100.0	81.5	100.0	81.4	100.0	100.0	100.0	100.0
Virginia	68.2	13.6	76.4	20.7	72.1	12.8	75.8	15.9
Washington	NA	NA	NA	NA	86.8	20.1	88.3	25.4
West Virginia	54.8	10.1	49.9	5.4	49.5	6.3	55.3	7.4
Wisconsin	78.8	22.7	80.6	25.4	74.0	22.0	79.2	23.8
Wyoming	97.3	4.2	96.5	4.3	90.5	2.0	97.9	2.1
Total	68.8	15.5	72.7	15.4	67.0	16.1	68.3	17.2

See footnotes at end of table.

Table 25. Percentage of Total Deliveries Represented by Onsystem Sales, by State, 1997-1999 — Continued

State	1998							
	November		October		September		August	
	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial
Alabama	73.6	23.3	71.5	21.7	76.3	21.5	78.7	20.1
Alaska	51.1	100.0	48.7	100.0	47.3	100.0	48.7	96.4
Arizona	82.9	35.3	79.9	36.7	83.7	33.3	83.0	32.7
Arkansas	86.1	10.2	81.5	10.4	82.4	9.6	84.9	8.0
California	38.8	10.5	37.5	11.1	33.2	8.7	29.0	8.0
Colorado	94.0	4.7	87.5	6.6	93.2	5.6	91.1	8.9
Connecticut	76.1	56.0	61.3	51.9	55.2	57.5	58.0	49.3
Delaware	100.0	23.2	100.0	18.2	100.0	17.9	100.0	11.5
District of Columbia	50.2	—	37.8	—	36.8	—	35.7	—
Florida	95.6	5.8	96.0	5.6	96.4	6.5	96.4	10.2
Georgia	77.4	19.2	74.6	19.6	73.6	28.4	71.5	15.0
Hawaii	100.0	—	100.0	—	100.0	—	100.0	—
Idaho	83.9	2.2	75.3	2.6	80.6	2.5	83.3	3.5
Illinois	44.8	10.0	40.7	9.0	37.3	7.7	36.5	6.6
Indiana	74.5	8.9	69.0	8.1	57.3	6.8	70.2	5.5
Iowa	84.0	9.7	77.4	6.8	77.0	5.7	82.1	5.7
Kansas	62.1	5.7	60.3	7.2	57.9	14.1	61.8	14.2
Kentucky	87.1	20.9	82.3	15.9	81.9	14.7	79.1	14.1
Louisiana	94.3	9.6	93.9	8.8	94.4	9.1	94.5	7.7
Maine	100.0	87.3	100.0	87.0	100.0	87.3	100.0	85.9
Maryland	38.3	9.5	25.2	8.6	23.0	3.9	22.7	7.2
Massachusetts	57.8	28.5	45.1	27.8	80.7	19.3	49.6	19.8
Michigan	57.9	10.9	47.8	6.5	42.5	6.3	37.5	4.8
Minnesota	95.9	40.4	97.9	37.1	99.3	36.7	99.0	35.3
Mississippi	95.5	38.6	95.3	37.4	94.8	34.0	97.1	37.3
Missouri	74.5	18.3	66.6	12.8	70.1	13.1	44.5	12.6
Montana	74.9	1.4	70.5	1.0	64.2	0.6	68.6	0.8
Nebraska	66.5	14.1	80.4	13.0	74.5	10.2	82.0	7.6
Nevada	63.6	27.5	62.6	25.5	55.5	19.1	55.2	17.7
New Hampshire	95.5	21.9	93.1	21.5	91.9	21.5	82.4	25.8
New Jersey	60.2	55.3	53.3	52.7	54.8	52.5	57.9	51.0
New Mexico	70.4	11.0	58.3	8.9	52.1	13.2	52.4	15.5
New York	53.3	7.7	50.2	10.7	43.3	6.9	43.2	8.2
North Carolina	87.5	34.1	83.2	27.1	84.9	23.4	86.2	27.3
North Dakota	86.2	18.8	80.7	20.5	68.1	13.1	67.2	8.5
Ohio	50.7	4.3	56.3	2.6	44.9	2.2	36.3	1.4
Oklahoma	65.7	3.7	60.5	1.9	59.7	1.9	59.5	1.9
Oregon	99.0	15.1	98.4	11.8	98.7	11.6	98.6	11.8
Pennsylvania	57.1	13.1	53.1	11.3	54.2	11.8	46.3	11.7
Rhode Island	52.2	8.8	48.1	6.6	48.1	6.3	100.0	6.5
South Carolina	96.9	86.5	96.9	87.4	97.2	88.2	97.2	88.0
South Dakota	84.5	45.3	95.8	40.1	73.7	22.1	74.9	18.3
Tennessee	86.9	32.9	76.2	21.4	75.5	32.2	72.6	32.3
Texas	84.4	13.4	71.8	14.9	78.9	14.9	76.7	14.1
Utah	82.2	10.5	80.1	9.9	77.6	8.9	71.6	8.4
Vermont	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Virginia	72.1	16.9	63.5	9.5	59.0	7.6	50.7	13.0
Washington	85.0	21.4	85.8	31.6	86.0	17.2	84.0	15.1
West Virginia	50.0	6.6	38.6	5.9	36.2	6.8	31.7	6.4
Wisconsin	74.9	24.4	71.1	19.0	45.5	18.0	48.5	14.7
Wyoming	87.7	2.0	83.8	2.2	84.9	2.4	92.6	2.6
Total	64.5	15.7	59.2	14.8	57.0	14.2	53.3	13.8

See footnotes at end of table.

Table 25. Percentage of Total Deliveries Represented by Onsystem Sales, by State, 1997-1999 — Continued

State	1998							
	July		June		May		April	
	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial
Alabama	78.6	22.4	80.9	23.0	81.7	22.4	83.0	23.8
Alaska	47.2	96.5	45.4	100.0	47.8	100.0	49.5	100.0
Arizona	84.4	32.9	86.4	33.8	83.6	35.9	85.2	32.8
Arkansas	86.1	7.2	86.8	8.3	88.8	9.9	93.0	9.3
California	36.4	9.2	58.4	10.8	53.9	11.3	58.3	10.5
Colorado	92.0	9.4	91.6	9.9	95.0	10.1	95.8	8.4
Connecticut	62.3	54.9	61.0	50.7	76.2	53.5	62.2	59.8
Delaware	100.0	18.1	100.0	19.7	100.0	19.9	100.0	23.8
District of Columbia	40.7	—	42.2	—	48.0	—	52.8	—
Florida	96.1	7.2	96.6	7.4	96.9	5.9	97.5	7.8
Georgia	71.5	11.5	80.9	29.3	83.7	29.9	86.3	28.7
Hawaii	100.0	—	100.0	—	100.0	—	100.0	—
Idaho	84.2	2.7	85.6	1.8	85.7	2.2	86.7	2.2
Illinois	27.8	5.4	43.2	5.7	35.7	7.4	45.0	9.9
Indiana	59.1	6.8	69.8	6.2	75.8	7.6	78.9	10.8
Iowa	72.4	5.2	73.6	4.8	88.9	4.5	84.4	5.6
Kansas	60.8	16.7	56.3	13.6	70.9	10.4	71.3	7.3
Kentucky	76.5	18.5	82.2	16.8	84.8	17.6	86.2	17.5
Louisiana	94.2	7.1	95.4	7.3	95.8	7.9	98.0	7.9
Maine	100.0	84.3	100.0	88.1	100.0	84.3	100.0	84.0
Maryland	22.2	2.8	24.3	5.2	26.8	8.1	32.1	2.6
Massachusetts	46.4	18.4	42.2	18.8	48.9	31.1	56.2	29.2
Michigan	39.6	5.6	42.3	6.1	44.3	7.5	60.1	12.1
Minnesota	98.8	36.6	99.2	43.0	99.5	36.3	99.1	39.6
Mississippi	95.2	35.2	95.9	38.1	94.6	37.4	94.1	37.0
Missouri	66.2	14.6	67.3	13.0	76.4	14.5	82.3	17.9
Montana	67.7	0.4	66.7	0.5	72.1	0.8	76.4	1.4
Nebraska	66.3	4.2	67.1	9.9	74.6	10.9	72.1	16.0
Nevada	65.2	3.6	70.0	4.2	71.0	4.4	72.9	5.3
New Hampshire	89.0	34.9	90.9	32.7	94.2	38.9	95.5	44.6
New Jersey	55.7	41.9	59.2	43.4	51.7	42.6	60.1	46.6
New Mexico	53.2	18.7	46.7	14.1	54.6	11.1	62.1	7.2
New York	43.2	6.3	49.8	6.2	48.2	5.4	53.6	8.9
North Carolina	85.8	33.3	85.1	30.9	88.8	33.9	92.1	38.7
North Dakota	80.4	11.1	81.7	10.5	78.8	6.4	79.6	13.2
Ohio	48.0	2.0	45.6	2.2	42.3	2.6	54.9	4.6
Oklahoma	61.8	2.1	61.9	2.3	69.6	3.0	75.4	5.1
Oregon	98.9	12.4	99.0	14.7	98.8	15.7	98.9	14.1
Pennsylvania	50.1	12.2	52.7	12.5	53.1	12.9	58.5	13.0
Rhode Island	47.3	5.7	52.2	6.3	57.4	6.5	58.1	7.5
South Carolina	97.7	87.4	97.8	88.1	98.4	87.6	98.6	85.9
South Dakota	75.5	22.7	73.0	25.2	66.0	17.1	93.7	60.2
Tennessee	73.0	32.4	75.9	35.6	82.4	32.6	81.6	38.9
Texas	72.4	12.4	84.3	15.2	77.6	14.2	80.4	14.6
Utah	70.6	7.3	75.6	8.8	73.6	8.6	82.5	7.7
Vermont	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Virginia	70.0	8.7	68.0	9.4	70.9	12.5	71.5	10.2
Washington	82.1	16.3	80.4	23.1	80.7	9.3	84.1	16.3
West Virginia	30.4	5.7	32.4	5.7	36.3	5.9	55.2	6.2
Wisconsin	47.6	14.7	55.5	17.3	55.6	17.0	75.5	21.5
Wyoming	84.9	2.3	86.2	2.3	90.8	1.6	92.8	2.3
Total	56.0	13.1	62.9	15.1	62.6	14.9	67.7	15.8

^R Revised Data.

NA Not Available.

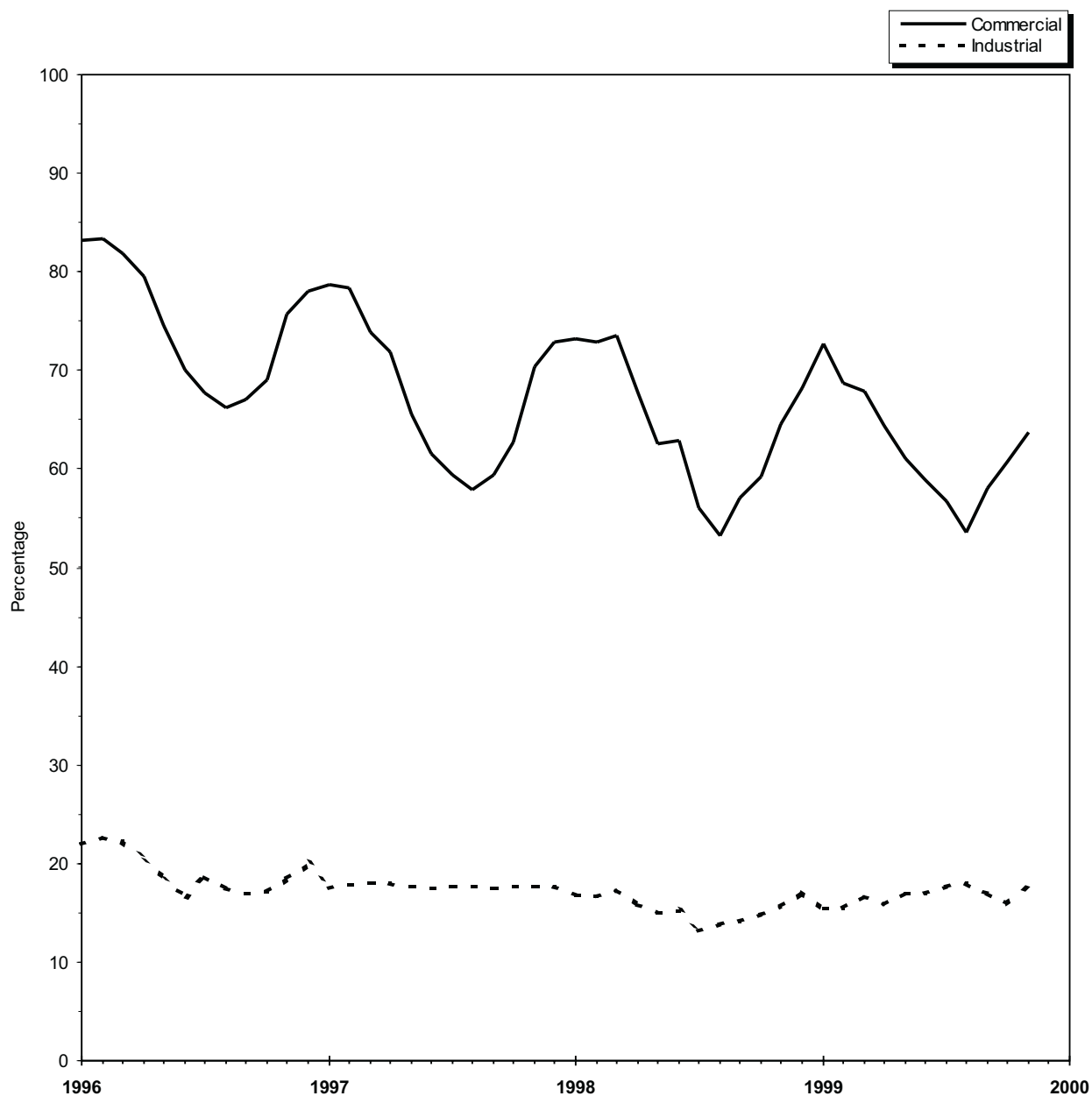
— Not Applicable.

Notes: Volumes of natural gas reported for the commercial and industrial sectors in this publication include data for both sales and deliveries for the account of others. This table shows the percent of the total State volume that represents natural gas sales to the commercial and

industrial sectors. This information may be helpful in evaluating commercial and industrial price data which are based on sales data only. See Appendix C, Statistical Considerations, for a discussion of the computation of natural gas prices.

Source: Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers."

Figure 6. Percentage of Total Deliveries Represented by Onsystem Sales, 1996-1999



Sources: Energy Information Administration, Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers" and Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition."

Table 26. Gas Home Customer-Weighted Heating Degree Days

Census Divisions	November 1 through November 30					December 1 through December 31				
	Normal ^a	1998	1999	Percent Change		Normal ^a	1998	1999	Percent Change	
				Normal to 1999	1998 to 1999				Normal to 1999	1998 to 1999
New England										
CT, ME, MA, NH, RI, VT	693	711	608	-12.3	-14.5	1,073	907	952	-11.3	5.0
Middle Atlantic										
NJ, NY, PA	646	618	536	-17.0	-13.3	1,010	818	899	-11.0	9.9
East North Central										
IL, IN, MI, OH, WI	730	642	592	-18.9	-7.8	1,142	956	1,051	-8.0	9.9
West North Central										
IA, KS, MN, MO, ND, NE, SD	788	673	564	-28.4	-16.2	1,235	1,084	1,054	-14.7	-2.8
South Atlantic										
DE, FL, GA, MD and DC, NC, SC, VA, WV	421	391	358	-15.0	-8.4	696	575	648	-6.9	12.7
East South Central										
AL, KY, MS, TN	431	362	350	-18.8	-3.3	717	617	667	-7.0	8.1
West South Central										
AR, LA, OK, TX	280	214	197	-29.6	-7.9	534	509	470	-12.0	-7.7
Mountain										
AZ, CO, ID, MT, NV, NM, UT, WY	715	651	546	-23.6	-16.1	1,006	1,008	933	-7.3	-7.4
Pacific ^b										
CA, OR, WA	341	382	309	-9.4	-19.1	519	577	471	-9.2	-18.4
U.S. Average ^b	559	514	452	-19.1	-12.1	881	781	796	-9.6	1.9

Census Divisions	January 1 through January 31					Cumulative November 1 through January 31				
	Normal ^a	1999	2000	Percent Change		Normal ^a	1999	2000	Percent Change	
				Normal to 2000	1999 to 2000				Normal to 2000	1999 to 2000
New England										
CT, ME, MA, NH, RI, VT	1,222	1,179	1,244	1.8	5.5	2,988	2,797	2,804	-6.2	0.3
Middle Atlantic										
NJ, NY, PA	1,168	1,095	1,151	-1.5	5.1	2,824	2,531	2,586	-8.4	2.2
East North Central										
IL, IN, MI, OH, WI	1,314	1,273	1,248	-5.0	-2.0	3,186	2,871	2,891	-9.3	0.7
West North Central										
IA, KS, MN, MO, ND, NE, SD	1,384	1,332	1,243	-10.2	-6.7	3,407	3,089	2,861	-16.0	-7.4
South Atlantic										
DE, FL, GA, MD and DC, NC, SC, VA, WV	809	670	791	-2.2	18.1	1,926	1,636	1,797	-6.7	9.8
East South Central										
AL, KY, MS, TN	843	652	762	-9.6	16.9	1,991	1,631	1,779	-10.6	9.1
West South Central										
AR, LA, OK, TX	631	468	467	-26.0	-0.2	1,445	1,191	1,134	-21.5	-4.8
Mountain										
AZ, CO, ID, MT, NV, NM, UT, WY	1,052	913	907	-13.8	-0.7	2,773	2,572	2,386	-14.0	-7.2
Pacific ^b										
CA, OR, WA	526	516	452	-14.1	-12.4	1,386	1,475	1,232	-11.1	-16.5
U.S. Average ^b	995	918	918	-7.7	0.0	2,435	2,213	2,166	-11.0	-2.1

^a Normal is based on calculations of data from 1961 through 1990.

^b Excludes Alaska and Hawaii.

Note: See Appendix A, Explanatory Note 10 for discussion of Heating Degree-Days computations.

Sources: National Oceanic and Atmospheric Administration.

Appendix A

Explanatory Notes

The Energy Information Administration (EIA) publishes monthly data for the supply and disposition of natural gas in the United States in the *Natural Gas Monthly* (NGM). The information in this Appendix is provided to assist users in evaluating the monthly data. There is a brief description of what data are estimated and what data are taken from submitted reports, followed by ten technical notes that provide important information for individual data series.

The monthly data are preliminary when initially published. Data shown in this report for the most current months are taken from the EIA Short-Term Integrated Forecasting System (STIFS) model computations. Each month, EIA staff review the STIFS model estimates and adjust them, if necessary, based on their knowledge of new developments in the natural gas industry. Data for prior months are estimated or taken from submitted reports.

Table A1. Methodology for Reporting Initial Monthly Natural Gas Supply and Disposition Data

Components	Reporting Methodology
Supply and Disposition	
Marketed Production	Reported on Form EIA-895 and Estimated from Historical Data
Extraction Loss	Derived from Marketed Production
Dry Production	Marketed Production minus Extraction Loss
Withdrawals from Storage	Reported on Form EIA-191
Supplemental Gaseous Fuels	Derived from Supply Estimates and Coal Gasification Information
Imports	Estimated from National Energy Board of Canada Information and Liquefied Natural Gas Information
Additions to Storage	Reported on Form EIA-191
Exports	Estimated from Industry Trends and Liquefied Natural Gas Information
Current-Month Consumption	Estimated from Historical Month-to-Month Percent Changes
Consumption by Sector	
Lease and Plant Fuel	Derived from Marketed Production
Pipeline Fuel	Derived from Estimates for Lease and Plant Fuel and Deliveries to Consumers
Residential	Estimated from Reports to the Sample Survey Form EIA-857
Commercial	Estimated from Reports to the Sample Survey Form EIA-857
Industrial	Estimated from Reports to the Sample Survey Form EIA-857
Electric Utilities	Reported on Form EIA-759

For data that are not taken from STIFS computations, Table A1 below lists the methodologies for deriving the monthly data to be published.

The STIFS model contains a series of calculations that produce forecasts for all of the energy industry. It is driven primarily by three sets of inputs or assumptions: estimates of key macroeconomic variables, world oil price assumptions, and assumptions about the severity of weather. The natural gas estimates also reflect other key inputs or assumptions including gas wellhead prices, electric power generation by other energy sources, and U.S. gas import capacity. The macroeconomic variable estimates are produced by DRI/McGraw-Hill but are adjusted by EIA to reflect EIA assumptions about the world price of oil, energy product prices, and other assumptions which may affect the macroeconomic outlook. The EIA publishes forecasts for the energy industry each quarter in the *Short-Term Energy Outlook*.

For production, total supply and disposition, and storage data (Tables 1, 2, and 9), the most current two months shown are estimates produced from STIFS computations, and data that are two months or more prior to the date of publication are estimated or taken from submitted reports. For example, in the March issue of the NGM, February and March data are taken from the STIFS model computations while January and prior months data are estimated from available data sources or reported directly on EIA forms. For consumption data by sector (Table 3), the most current three months shown are estimates produced from STIFS computations while data that are three months prior to date of publication are taken from EIA forms.

Note 1. Nonhydrocarbon Gases Removed

Annual Data

Data on nonhydrocarbon gases removed from marketed production—carbon dioxide, helium, hydrogen sulfide, and nitrogen—are reported by State agencies on the voluntary Form EIA-895. For 1995, of the 33 producing States, 22 reported data on nonhydrocarbon gases removed. The 22 States accounted for 60 percent of total 1995 gross withdrawals. Of the 22 States reporting nonhydrocarbon gases removed, 11 reported zero values: Alaska, Arizona, Arkansas, Colorado, Illinois, Maryland, Missouri, Nevada, New York, South Dakota, and Virginia. The ten States reporting volumes greater than zero are

Alabama, California, Florida, Kentucky, Mississippi, Nebraska, New Mexico, North Dakota, Texas, and Wyoming. In addition, Kansas, Louisiana, Montana, and Oklahoma, which together accounted for 40 percent of gross withdrawals, did not report nonhydrocarbon gases removed separately. However, their gross withdrawal data excluded all or most of the nonhydrocarbon gases removed on leases. No estimates are made for States not reporting nonhydrocarbon gases removed.

Preliminary Monthly Data

All monthly data are considered preliminary until after publication of the *Natural Gas Annual* for the year in which the report month falls. Seven States report monthly data on nonhydrocarbon gases removed: Alabama, Arizona, Mississippi, New Mexico, North Dakota, Oregon and Texas. Monthly data for California, Colorado, Florida, and Wyoming are estimated based on annual data reported on Form EIA-895. Nonhydrocarbon gases as an annual percentage of gross withdrawals reported by each of the six States is applied to each State's monthly gross withdrawal data to produce an estimate of nonhydrocarbon gases removed.

Final Monthly Data

Beginning with report year 1990, States filing the Form EIA-627, "Annual Quantity and Value of Natural Gas Report," were asked to supply monthly breakdowns of all data previously reported on an annual basis. The sums of the reported figures were used to calculate monthly volumes. In 1997 the Form EIA-627 was discontinued. States were requested to file an annual schedule on the monthly Form EIA-895, "Monthly Quantity and Value of Natural Gas Report."

For States not supplying monthly data on the annual schedule of the EIA-895, final monthly data are calculated by proportionally allocating the differences between total annual data reported on the Form EIA-895 and the sum of monthly data (January-December).

Note 2. Supplemental Gaseous Fuels

Annual Data

Annual data are published from Form EIA-176.

Preliminary Monthly Data

All monthly data are considered preliminary until after the publication of the *Natural Gas Annual* for the year in which the report month falls. Monthly estimates are based on the annual ratio of supplemental gaseous fuels to the sum of dry gas production, net imports, and net withdrawals from storage. This ratio is applied to the monthly sum of these three elements to compute a monthly supplemental gaseous fuels figure.

Final Monthly Data

Monthly data are revised after publication of the *Natural Gas Annual*. Final monthly data are estimated based on the revised annual ratio of supplemental gaseous fuels to the sum of dry gas production, net imports, and net withdrawals from storage. This ratio is applied to the revised monthly sum of these three elements to compute final monthly data.

Note 3. Production

Annual Data

Natural gas production data are collected from 33 gas-producing States on Form EIA-895 which includes gross withdrawals, vented and flared, repressuring, nonhydrocarbon gases removed, fuel used on leases, marketed production (wet), and extraction loss. The U.S. Minerals Management Service (MMS) also supplies data on the quantity and value of natural gas production on the Gulf of Mexico and Outer Continental Shelf. No adjustments are made to the data.

Estimated Monthly Data

State marketed production data for a particular month are estimated if data are unavailable at the time of publication. The data are estimated based on final monthly data reported on the Form EIA-895 for the previous year.

Estimates for total U.S. marketed production are based on final monthly data reported on the Form EIA-895 for the previous year. State estimates for nonhydrocarbon gas removed, gas used for repressuring, and gas vented and flared are based on the ratio of the item to gross withdrawals as reported on the EIA-895. These ratios are applied to the month's estimates for gross withdrawals to calculate figures for nonhydrocarbon gases removed, gas used for repressuring, and gas vented and flared. Estimates for gross withdrawal data are calculated from final

monthly data filed on Form EIA-895 for the previous year.

Preliminary Monthly Data

All monthly data are considered preliminary until after publication of the *Natural Gas Annual* for the year in which the report month falls. Preliminary monthly data are published from reports from the Form EIA-895 and the MMS. Volumetric data are converted, as necessary, to a standard 14.73 psia pressure base. Data are revised as Table 7 monthly data are updated.

Final Monthly Data

Final monthly data for 1993, 1994, and 1995 are the sums of monthly data reported on the annual Form EIA-627, "Annual Quantity and Value of Natural Gas Report." For prior years, the differences between each State's annual production data reported on the EIA-627 and the sum of its monthly IOGCC reports for the year were allocated proportionally to the monthly IOGCC data.

Note 4. Imports and Exports

Annual Data and Final Monthly Data

Annual and final monthly data are published from the Office of Fossil Energy, U.S. Department of Energy, *Natural Gas Imports and Exports*, which requires data to be reported each quarter by month for the calendar year.

Preliminary Monthly Data - Imports

Preliminary monthly import data are based on data from the National Energy Board of Canada and responses to informal industry contacts and EIA estimates. Preliminary data are revised after the publication of the article "U.S. Imports and Exports of Natural Gas" for the calendar year.

Preliminary Monthly Data - Exports

Preliminary monthly export data are based on historical data from the Office of Fossil Energy, U.S. Department of Energy, *Natural Gas Imports and Exports*, informal industry contacts, and information gathered from natural gas industry trade publica-

tions. Preliminary monthly data are revised after publication of "U.S. Imports and Exports of Natural Gas" for the calendar year in which the report month falls.

Note 5. Consumption

All Annual Data

All consumption data except electric utility data are from the Form EIA-857 and Form EIA-176. No adjustments are made to the data. Electric utility data are reported on Form EIA-759.

Monthly Data

All monthly data are considered preliminary until after publication of the *Natural Gas Annual*.

Total Consumption

Preliminary Monthly Data

The most current month estimate is calculated based on the arithmetic average change from the previous month for the previous 3 years. The following month this estimate is revised by summing the components (pipeline fuel, lease and plant fuel, and deliveries to consumers).

Final Monthly Data

Monthly data are revised after publication of the *Natural Gas Annual*. Final monthly total consumption is obtained by summing its components.

Residential, Commercial, and Industrial Sector Consumption

Preliminary Monthly Data

Preliminary monthly residential, commercial, and industrial data are from Form EIA-857. See Appendix C, "Statistical Considerations," for a detailed explanation of sample selection and estimation procedures.

Average Price of Deliveries to Consumers

Price data are representative of prices for gas sold and delivered to residential, commercial, and industrial consumers. These prices do not reflect average

prices of natural gas transported to consumers for the account of third parties or "spot-market" prices.

Final Monthly Data

Monthly data are revised after the publication of the *Natural Gas Annual*. Final monthly data are estimated by allocating annual consumption data from the Form EIA-176 to each month in proportion to monthly volumes reported in Form EIA-857.

Agricultural Use

Beginning with the reporting of 1996 annual data, the EIA changed the customer category used for reporting deliveries to consumers in the agricultural industry from commercial to industrial. In 1995 and earlier years, consumption of natural gas for agricultural use was classified as commercial use. Separate reports of the volumes affected are not available so the direct impact of this change is not known. Most natural gas consumed in agriculture is used to drive irrigation systems and to dry crops.

For the reporting of monthly data, the customer category will not be changed until 1998. In 1996, the monthly data reported under the old classification were adjusted to the annual data reported under the new classification. Monthly 1997 data will be adjusted in the same way as the 1996 data.

In comparing sectoral use over time, note that:

- There is an inherent shift in natural gas volumes from the commercial to industrial sectors due simply to changes in the reporting requirements. This break in series may indicate a spurious increase in industrial consumption with a corresponding decrease in the commercial sector.
- The sum of natural gas volumes consumed by the commercial and industrial sectors will not be changed by this modification of the instructions.

Electric Utility Sector Consumption

All Monthly Data

Monthly data published are from Form EIA-759.

Pipeline Fuel Consumption

Preliminary Monthly Data

Preliminary data are estimated based on the pipeline fuel consumption as an annual percentage of total consumption from the previous year's Form EIA-176. This percentage is applied to each month's total consumption figure to compute the monthly estimate.

Final Monthly Data

Monthly data are revised after the publication of the *Natural Gas Annual*. Final monthly data are based on the revised annual ratio of pipeline fuel consumption to total consumption from the Form EIA-176. This ratio is applied to each month's revised total consumption figure to compute final monthly pipeline fuel consumption estimates.

Lease and Plant Fuel Consumption

Preliminary Monthly Data

Preliminary monthly data are estimated based on lease and plant fuel consumption as an annual percentage of marketed production. This percentage is applied to each month's marketed production figure to compute estimated lease and plant fuel consumption.

Final Monthly Data

Monthly data are revised after publication of the *Natural Gas Annual*. Final monthly plant fuel data are based on a revised annual ratio of lease and plant fuel consumption to marketed production from Form EIA-176. This ratio is applied to each month's revised marketed production figure to compute final monthly plant fuel consumption estimates. Final monthly lease data are collected on the Form EIA-627 and estimates from the Form EIA-176. See the *Natural Gas Annual* for a complete discussion of this process.

Note 6. Extraction Loss

Annual Data

Extraction loss data are calculated from filings of Form EIA-64A, "Annual Report of the Origin of Natural Gas Liquids Production." For a fuller discussion, see the *Natural Gas Annual*.

Preliminary Monthly Data

Preliminary data are estimated based on extraction loss as an annual percentage of marketed production.

This percentage is applied to each month's marketed production to estimate monthly extraction loss.

Final Monthly Data

Monthly data are revised after the publication of the *Natural Gas Annual*. Final monthly data are estimated by allocating annual extraction loss data to each month based on its total natural gas marketed production.

Note 7. Natural Gas Storage

Underground Natural Gas Storage

All monthly data concerning underground storage are published from the EIA-191. A new EIA-191 became effective in January 1994. Injection and withdrawal data from the EIA-191 survey are adjusted to correspond to data from Form EIA-176 following publication of the *Natural Gas Annual*.

Underground and Liquefied Natural Gas Storage

The final monthly and annual storage and withdrawal data for 1991 through 1995 shown in Table 2 include both underground and liquefied natural gas (LNG) storage. Underground storage data are obtained from the EIA-191 and EIA-176 surveys in the manner described earlier. Annual data on LNG additions and withdrawals are taken from Form EIA-176. Monthly data are estimated by computing the ratio of each month's underground storage additions and withdrawals to annual underground storage additions and withdrawals and applying it to annual LNG data.

Types of Underground Storage Facilities

There are three principal types of underground storage facilities in operation in the United States today: salt caverns (caverns hollowed out in salt "bed" or "dome" formations), depleted fields (depleted reservoirs in oil and/or gas fields), and aquifer reservoirs (water-only reservoirs conditioned to hold natural gas). A storage facility's daily deliverability or withdrawal capability is the amount of gas that can be withdrawn from it in a 24-hour period. Salt cavern storage facilities generally have high deliverability because all of the

working gas in a given facility can be withdrawn in a relatively short period of time. (A typical salt cavern cycle is 10 days to deplete working gas, and 20 days to refill working gas.) By contrast, depleted field and aquifer reservoirs are designed and operated to withdraw all working gas over the course of an entire heating season (about 150 days). Further, while both traditional and salt cavern facilities can be switched from withdrawal to injection operations during the heating season, this is usually more quickly and easily done in salt cavern facilities, reflecting their greater operational flexibility.

Note 8. Average Wellhead Value

Annual Data

Form EIA-895 requests State agencies to report the quantity and value of marketed production. When complete data are unavailable, the form instructs the State agency to report the available value and the quantity of marketed production associated with this value. A number of States reported volumes of production and associated values for other than marketed production. In addition, information for several States which were unable to provide data was obtained from Form EIA-176. It should be noted that Form EIA-176 reports a fraction of State production. The imputed value of marketed production in each State is calculated by dividing the State's reported value by its associated production. This unit price is then applied to the quantity of the State's marketed production to derive the imputed value of marketed production.

Preliminary Monthly Data

Preliminary values for the monthly U.S. Natural gas wellhead price are estimated from the prevailing cash market prices at 5 major trading hubs: Henry Hub, LA; Carthage, TX; Katy, TX; Waha, TX; and Blanco, NM. These prices appear initially in the trade publication, *Natural Gas Week*, and they reflect the spot delivered-to-pipeline, volume-weighted average prices for natural gas bought and sold at the specified trading hubs. Prices include processing, gathering, and transportation fees to the hubs. The estimated wellhead prices are derived with a statistical procedure based on analysis of monthly time series data for the period 1995 through 1997. The preliminary estimates are replaced when annual survey data become available. This procedure was adopted beginning with publication of the February

1999 issue of the *Natural Gas Monthly* and it affects price estimates from January 1998 to the present.

Final Monthly Data

The Form EIA-895 requests State agencies to report monthly values of marketed production. Preliminary monthly gas price data are replaced by these final monthly data.

Note 9. Balancing Item

The "balancing item" category represents the difference between the sum of the components of natural gas supply and the sum of the components of natural gas disposition. These differences may be due to quantities lost or to the effects of data reporting problems.

Reporting problems include differences due to the net result of conversions of flow data metered at varying temperatures and pressure bases and converted to a standard temperature and pressure base; the effect of variations in company accounting and billing practices; differences between billing cycles and calendar periods; and imbalances resulting from the merger of data reporting systems, which vary in scope, format, definitions, and type of respondents.

Annual Data

Annual data are from the *Natural Gas Annual*. For an explanation of the methodology involved in calculating annual "balancing item" data, see the *Natural Gas Annual*.

Preliminary Monthly Data

Preliminary monthly data in the "balancing item" category are calculated by subtracting dry gas production, withdrawals from storage, supplemental gaseous fuels, and imports from total supply/disposition.

Note 10. Heating Degree-Days

Degree-days are relative measurements of outdoor air temperature. Heating degree-days are deviations of the mean daily temperature below 65 degrees Fahrenheit. A weather station recording a mean daily temperature of 40 degrees Fahrenheit would report 25 heating degree-days. There are several de-

gree-day data bases maintained by the National Oceanic and Atmospheric Administration. The information published in the Natural Gas Monthly is developed by the National Weather Service Climate Analysis Center, Camp Springs, Maryland.

The data are available weekly with monthly summaries and are based on mean daily temperatures re-

corded at about 200 major weather stations around the country. The temperature information recorded at these weather stations is used to calculate Statewide degree-day averages weighted by gas home customers. The State figures are then aggregated into Census Divisions and into the national average.

Appendix B

Data Sources

The data in this publication are taken from survey reports authorized by the U.S. Department of Energy (DOE), Energy Information Administration (EIA) and by the Federal Energy Regulatory Commission (FERC). The EIA is the independent statistical and analytical agency within the DOE. The FERC is an independent regulatory commission within the DOE which has jurisdiction primarily in the regulation of electric utilities and the interstate natural gas industry. The EIA conducts and processes some of the surveys authorized by the FERC. Data are collected from two annual surveys and five monthly surveys.

The annual report is the Form EIA-176, a mandatory survey of all companies that deliver natural gas to consumers or that transport gas across State lines.

The monthly reports include two surveys of the natural gas industry, two surveys of the electric utility industry, and a voluntary survey completed by energy or conservation agencies in the gas producing States. The natural gas industry survey is the Form EIA-191 filed by companies that operate underground storage facilities, and the Form EIA-857 is filed by a sample of companies that deliver natural gas to consumers. The electric utility industry surveys are the Form EIA-759 filed by all generating electric utilities and the Form FERC-423 filed by fossil fueled plants. Responses to these four monthly surveys are mandatory.

A description of the survey respondents, reporting requirements, and processing and editing of the data is given on the following pages for each of the surveys.

Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition"

Survey Design

The original version of Form EIA-176 was approved in 1980 with a mandatory response requirement. Prior to 1980, published data were based on voluntary responses to Bureau of Mines, U.S. Department of the Interior predecessor Forms BOM-6-1340-A and BOM-6-1341-A of the same title.

In 1982, the scope of the revised EIA-176 survey was expanded to collect the number of electric utility consumers in each State, volumes of gas transported to industrial and electric utility consumers, detailed information on volumes transported across State borders by the respondent for others and for the responding company, and detailed information on other disposition. These changes were incorporated to provide more complete survey information with a minimal change in respondent burden. The 1982 version of the Form EIA-176 continues to be the basis for the current version of this form.

In 1988, the Form EIA-176 was revised to include data collection for deliveries of natural gas to commercial and industrial consumers for the account of others. A short version of Form EIA-176 was also approved in 1988. Companies engaged in purchase and delivery activities but not in transportation and storage activities may file the short form. Usually, these companies are municipals handling small volumes of gas. form was approved for use beginning with report year 1990.

In 1990, the Form EIA-176 was revised to include more detailed information for gas withdrawn from storage facilities, gas added to storage facilities, deliveries of company-owned natural gas and natural gas transported for the account of others. The revised form was approved for use beginning with report year 1990.

Upon the Office of Management and Budget's approval in 1993, the Form EIA-176 was again revised. All deliveries to consumers are now categorized as firm or interruptible. Commercial and industrial consumers are further categorized as nonutility power producers or as those excluding nonutility power producers.

Data reported on this form are no longer considered proprietary. Response to the form continues to be mandatory.

Survey Universe and Response Statistics

The Form EIA-176 is mailed to all identified interstate and intrastate natural gas pipeline companies, investor and municipally owned natural gas distributors, underground natural gas storage operators, synthetic natural gas plant operators, and field, well, or processing plant operators that deliver natural gas directly to consumers (including their own industrial facilities) and /or that transport gas to, across, or from a State border through field or gathering facilities.

Each company and its parent company or subsidiaries were required to file if they met the survey specifications. The original mailing in 1999 for report year 1998 totaled 1,910 questionnaire packages. To this original mailing, 5 names were added and 32 were deleted as a result of the survey processing. Additions were the result of comparisons of the mailing list to other survey mailing lists. Deletions resulted from post office returns and determinations that companies were out of business, sold, or not within the scope of the survey. After all updates, the survey universe was 1,883 responses from approximately 1,800 companies.

Following the original mailing, second request mailing, and nonrespondents follow-up, 1,883 responses were entered into the data base, and there were 50 nonrespondents.

Summary of Form EIA-176 Data Reporting Requirements

The EIA-176 is a multi-line schedule for reporting all supplies of natural gas and supplemental gaseous fuels and their disposition within the State indicated. Respondents file completed forms with EIA in Washington, DC. Data for the report year are due by April 1 of the following year. Extensions of the filing deadline for up to 45 days are granted to any respondent on request.

All natural gas and supplemental gaseous fuels volumes are reported on a physical custody basis in thousand cubic feet (Mcf), and dollar values are reported to the nearest whole dollar. All volumes are reported at 14.73 pounds per square inch absolute pressure (psia) and 60 degrees Fahrenheit.

Routine Form EIA-176 Edit Checks

A series of manual and computerized edit checks are used to screen the Form EIA-176. The edits performed include validity, arithmetic, and analytical checks.

The incoming forms are reviewed prior to keying. This prescan determines if the respondent identification (ID) number and the company name and address are correct, if the data on the form appear complete and reasonable, and if the certifying information is complete.

Manual checks on the data are also made. Each form is prescanned to determine that data were reported on the correct lines. The flow of gas through interstate pipelines is checked at the company level to ensure that each delivery from a State is matched with a corresponding receipt in an adjoining State.

After the data are keyed, computer edit procedures are performed. Edit programs verify the report year, State code, and arithmetic totals. Further tests are made to ensure that all necessary data elements are present and that the data are reasonable and internally consistent. The computerized edit system produces error listings with messages for each failed edit test. When problems occur, respondents are contacted by telephone and required to file amended forms with corrected data.

Other EIA Publications Referencing Form EIA-176

Data from Form EIA-176 are also published in the *Natural Gas Annual*.

Form-627 and Form EIA-895

Survey Design

Beginning with 1980 data, natural gas production data previously obtained on an informal basis from the appropriate State agencies were collected on the Form EIA-627, "Annual Quantity and Value of Natural Gas Report." This form was designed by the EIA to collect annual natural gas production data from the appropriate State agencies under a standard data reporting system within the limits imposed by the diversity of data collection systems of the various producing States. It was also designed to avoid duplication of the efforts involved in the collection of production and value data by producing States and to avoid an unnecessary respondent burden on gas and oil well operators. In 1993, value and associated volume of marketed production by month was added to the EIA-627. In 1996, the Form EIA-627 was discontinued. The information is collected on an annual schedule on the Form EIA-895.

In 1993, the Office of Management and Budget approved the Form EIA-627 for use in report years 1994 through 1996. In 1994, the IOGCC decided to discontinue collection of their form. Data collection on the Form EIA-895 began in January 1995. This form was designed to replace the Interstate Oil and Gas Compact Commission (IOGCC) form, "Monthly Report of Natural Gas Production." All gas producing States are requested to report on the Form EIA-895; a voluntary report. In 1996, an annual schedule was added to the voluntary Form EIA-895 to replace the Form EIA-627. Data are reported by State agencies. The form was designed to provide a standard reporting system, to the extent possible, for the natural gas data reported by the States. Data are not considered proprietary.

Survey Universe and Response Statistics

Form EIA-895 is mailed to energy or conservation agencies in all 33 natural gas producing States. All producing States participate voluntarily in the EIA-895 survey by filing the completed form or by responding to telephone contacts. EIA-895 survey by fil-

ing the completed form or by responding to telephone contacts.

Reports on State production are due 20 days after the end of the report month. (In most cases, the data are not available to the States until after this time period.

Therefore, States are requested to send the report within 80 days after the end of the report month.) The annual schedule of the Form EIA-895 is due with the December data report.

Of the 33 natural gas producing states, 31 participated in the voluntary EIA-895 survey by filing the completed form or by responding to telephone contacts. Data for the 2 nonresponding States (Illinois and West Virginia) were estimated. Data on the quantities of nonhydrocarbon gases removed in 1998 were reported by the appropriate agencies of 22 of the 33 producing States. These 22 States accounted for 66 percent of total 1998 gross withdrawals. In addition, the gross withdrawal data from Kansas, Louisiana, Montana, and Oklahoma, which together accounted for 39 percent of total production, excluded all or most of the nonhydrocarbon gases removed on leases. The State of Missouri reported zero gross withdrawals.

The commercial recovery of methane from coalbeds contribute a significant amount to the production totals in a number of States. Coalbed methane seams production quantities (in million cubic feet) are included in gross withdrawals totals for the following States: Alabama (116,946), Colorado (387,376), and New Mexico (608,000).

Summary of Data Reporting Requirements

The Form EIA-895 is a two-page form divided into five parts. Part I requests identifying information including the name and location of the responding State agency and the name and telephone number of a contact person within the agency. Part II collects monthly data on the production of natural gas including gross withdrawals from both gas and oil wells; volumes returned to formation for repressuring, pressure maintenance, and cycling; quantities vented and flared; quantities of nonhydrocarbon gases removed; quantities of fuel used on lease; and marketed production. Part III of the form is for reporting the monthly volume and value of marketed production. Part IV of the form is the annual schedule which collects data on the

number of producing gas wells, the production of natural gas including gross withdrawals from both gas and oil wells; volumes returned to formation for repressuring, pressure maintenance, and cycling; quantities vented and flared; quantities of nonhydrocarbon gases removed; quantities of fuel used on lease; marketed production; the value of marketed production; and quantity of marketed production (value based). Part V is space to be used by the respondent to explain data elements reported that may be based on definitions differing from those applied to data in previous years.

Respondents are asked to report all volumes in thousand cubic feet at the State's standard pressure base and at 60 degrees Fahrenheit. All dollar values are reported in thousands.

Routine Form EIA-895 Edit Checks

Each filing of Form EIA-895 is manually checked for reasonableness and mathematical accuracy. Information on the forms is compared to totals of monthly data reported. Volumes are converted, as necessary, to a standard 14.73 psia pressure base. Reasonableness of data is assessed by comparing reported data to the previous year's data. State agencies are contacted by telephone to correct errors. Amended filings or resubmissions are not a requirement, since participation in the survey is voluntary.

Other EIA Publications Referencing Form EIA-895

Data from Form EIA-895 are also published in the EIA publication, *Natural Gas Annual*.

EIA-191 Survey, "Underground Natural Gas Storage Report"

Survey Design

The Form EIA-191, "Underground Natural Gas Storage Report," was revised effective January 1994. Among the changes from the form used from 1991 through 1993 is a distinction between a monthly and annual survey. Prior to 1991, data on the storage of natural gas were collected on a survey jointly implemented in 1975 by the Federal Power Commission (FPC), the Federal Energy Administration (FEA), and the Bureau of Mines (BOM) as the FPC-8/ FEA-G-318 system. The data received on both the FPC-8 and

FEA-G-318 were computerized and aggregated by FPC. The form was previously revised in 1991 to include storage data by State, field, and reservoir.

At the beginning of 1979, the EIA assumed responsibility for the collection, processing, and publication of the data gathered in the survey. Form FEA-G-318 was renewed on July 1, 1979, as Form EIA-191 and the survey was retitled the FPC-8/EIA-191 Survey (Figure D4 shows the EIA-191). Form FPC-8 was renewed in December 1985 and the survey retitled FERC-8/EIA-191 Survey. The forms were not merged because of FERC's stated desire to maintain the separate identity of the FERC-8 for administrative reasons. In September 1995, the FERC discontinued the reporting requirements of Form FERC-8. FERC jurisdictional firms will continue to file Form EIA-191.

Survey Universe and Response Statistics

The 114 companies that operate underground facilities will file the Form EIA-191. Of these companies, 42 are subject to the jurisdiction of FERC and are required to report data on Form EIA-191.

The response rate as of the filing deadline is approximately 20 percent. Data from the remaining 80 percent of respondents are received in writing and/or by telephone within 3 to 4 days after the filing deadline. All data supplied by telephone are subsequently filed in writing, generally within 15 days of the filing deadline. The final response rate is 100 percent.

Summary of EIA-191 Data Reporting Requirements

The EIA-191 monthly schedule contains current month and prior month's data on the total quantities of gas in storage, injections and withdrawals, the location (including State and county, field, reservoir) and peak day withdrawals during the reporting period. Prior month's data are required only when data are revised. Information on co-owners of storage fields has been eliminated. The annual schedule contains type of facility, storage field capacity, maximum deliverability and pipelines to which each field is connected. The annual schedule is filed with the January submission.

Collection of the survey is on a custody basis. Information requested must be provided within 20 days after the first day of each month. Twelve reports are required per calendar year. Respondents are required to indicate whether the data reported are actual or estimated. For most of the estimated filings, the actual data or necessary revisions are reflected in the prior month section of the monthly form. Actual data on natural gas injections and withdrawals from underground storage are based on metered quantities. Data on quantities of gas in storage and on storage capacity represent, in part, reservoir engineering evaluations. All volumes are reported at 14.73 psia and 60 degrees Fahrenheit.

Routine Form EIA-191 Edit Checks

Data received on Form EIA-191 are entered into the survey processing system. The survey's five principal data elements (total, base, working gas in storage, injections, and withdrawals) receive a preliminary visual edit to eliminate and correct obvious errors or omissions. Respondents are required to re-file reports containing any inconsistencies or errors.

Other EIA Publications Referencing Form EIA-191

The EIA publication *Monthly Energy Review* and *Winter Fuels Report* contain data from the EIA-191 survey.

"Quarterly Natural Gas Import and Export Sales and Price Report"

Survey Design

The collection of data covering natural gas imports and exports was begun in 1973 by the Federal Power Commission (FPC). On October 1977, FPC ceased to exist and its data collection functions were transferred to the Federal Energy Regulatory Commission (FERC) within the Department of Energy (DOE). From 1979 to 1994, the Energy Information Administration (EIA) has had the responsibility for collecting Form FPC-14, "Annual Report for Importers and Exporters of Natural Gas." Data are not considered proprietary. The Form FPC-14 was discontinued in 1995.

Beginning in 1995, import and export data are taken from the "Quarterly Natural Gas Import and Export Sales and Price Report." This report is prepared by the Office of Fossil Energy, U.S. Department of Energy, based on information submitted by all firms having authorization to import or export natural gas.

Survey Universe and Response Statistics

All companies are required, as a condition of their authorizations to import or export natural gas, to file quarterly reports with the Office of Fossil Energy. These data are collected as part of its regulatory responsibilities. The data are reported at a monthly level of detail. Data reported on the Form FPC-14 represented physical movements of natural gas. Data collected by the Office of Fossil Energy are reported on an equity (sales) basis. For 1994 and earlier years, comparisons of the data from the two sources may show differences because reporting requirements were different. Prior to 1995, the Form FPC-14 was filed annual by each organization or individual having authority to import and export natural gas regardless of whether any activity took place during the reporting year. Authorizations to import and export were originally granted by the FPC. In 1977, the authority to grant authorizations transferred to the Economic Regulatory Administration (ERA). It now resides with the Office of Fossil Energy, U.S. Department of Energy.

Routine Edit Checks

Respondents are required to certify the accuracy of all data reported. The data are checked for reasonableness and accuracy. If errors are found, the companies are required to file corrected data. The data are compared with data reported by the National Energy Board of Canada and are published quarterly. All natural gas volumes in this report are expressed at a pressure base of 14.73 pounds per square inch absolute and temperature of 60 degrees Fahrenheit, except as noted. All import and export prices are in U.S. dollars and, except for LNG exports, are those paid at the U.S. border. LNG export prices are those paid at the point of sale and delivery in Yokohama, Japan.

Form EIA-857, “Monthly Report of Natural Gas Purchases and Deliveries to Consumers”

Survey Design

The original Form EIA-857 was approved for use in December 1984. Response to the Form EIA-857 is mandatory on a monthly basis. Data collected on the Form EIA-857 cover the 50 States and the District of Columbia and include both price and volume data. Data are considered proprietary.

Survey Universe and Response Statistics

A sample of approximately 400 natural gas companies, including interstate pipelines, intrastate pipelines, and local distribution companies, report to the survey. The sample was selected independently for each of the 50 States and the District of Columbia from a frame consisting of all respondents to Form EIA-176 who reported deliveries of natural gas to consumers in the residential, commercial, or industrial sectors. Each selected company is required to complete and file the Form EIA-857 on a monthly basis. Initial response statistics on a monthly basis are as follows: responses received by due date, approximately 50 percent, and responses received after follow-up, 100 percent. Virtually all are received in time for incorporation in the current month’s processing cycle. When a response is extremely late, and the company represents less than 25 percent of the natural gas volumes delivered by all sampled companies in the State, values are imputed as described in Appendix C. When the company’s submission is

eventually received, the submitted data are used for future processing and revisions.

The Form EIA-857 is a monthly sample survey of firms delivering natural gas to consumers. It provides data that are used to estimate monthly sales of natural gas (volume and price) by State and monthly deliveries of natural gas on behalf of others (volume) by State to three consumer sectors - residential, commercial, and industrial. (Monthly deliveries and prices of natural gas to electric utilities are reported on the Form FERC-423, “Monthly Report of Cost and Quality of Fuels for Electric Plants,” and the Form EIA-759, “Monthly Power Plant Report.”) See Appendix C for a discussion of the sample design and estimation procedures.

Summary of Form EIA-857 Data Reporting Requirements

Data collected monthly on the Form EIA-857 on a State level include the volume and cost of purchased gas, the volume and cost of natural gas consumed by sector (residential, commercial, and industrial), and the average heat content of all gas consumed. Respondents file completed forms with EIA in Washington, DC on or before the 30th day after the end of the report month.

All natural gas volumes are reported in thousand cubic feet at 14.73 psia at 60 degrees Fahrenheit and dollar values are reported to the nearest whole dollar.

Routine Form EIA-857 Edit Checks

A series of manual and computerized edit checks are used to screen the Form EIA-857. The edits performed include validity and analytical checks.

Appendix C

Statistical Considerations

The monthly sales (volume and price) and monthly deliveries (volume) of natural gas to residential, commercial and industrial consumers presented in this report by State are estimated from data reported on the Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers." (See Appendix B for a description of this Form.) These estimations must be made from the reported data since the Form EIA-857 is a sample survey. A description of the sample design and the estimation procedures is given below.

Sample Design

The Form EIA-857 is a monthly sample survey of companies delivering natural gas to consumers. It includes inter- and intrastate companies, and producers, as well as local distribution companies. The survey provides data that are used each month to estimate the volume of natural gas delivered and the price for onsystem sales of natural gas by State to three consumer sectors—residential, commercial, and industrial. Monthly deliveries and prices of natural gas to electric utilities are reported on the Form EIA-759, "Monthly Power Plant Report," and the Form FERC-423, "Monthly Report of Costs and Quality of Fuels for Electric Plants."

Sample Universe. The sample currently in use was selected from a universe of 1,538 companies. These companies were respondents to the Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition," for reporting year 1995 who reported sales or deliveries to consumers in the residential, commercial or industrial sectors. (See Appendix B for a description of the Form EIA-176.)

Sampling Plan. The goal was a sample that would provide estimates of monthly natural gas consumption by the three consuming sectors within each State and the District of Columbia. A stratified sample using a single stage and systematic selection with probability

proportional to size was designed. The measure of size was the volume of natural gas physically delivered in the State to the three consuming sectors by the company in 1995. There were two strata—companies selected with certainty and companies selected under the systematic probability proportional to size design.

Initial calculations showed that a 25 percent sample of companies would yield reasonably accurate estimates. The sample was selected independently in each State, resulting in a national total of 387 respondent companies. Unlike previous years, no mergers or acquisitions were uncovered as a result of the initial mail-out. Therefore there was no need for either substitution of respondent companies or a reduction in the total number of respondents.

Certainty Stratum. Since estimates were needed for each of the 50 States and the District of Columbia, the strata were established independently within each State. In 16 States and the District of Columbia where sampling was not feasible due to small numbers of companies and/or small volumes of gas deliveries, all companies were selected. The 16 States were: Alaska, Connecticut, Delaware, Hawaii, Idaho, Maine, North Dakota, New Hampshire, New Jersey, Nevada, Oregon, Rhode Island, South Dakota, Utah, Vermont, and Washington.

For each of the remaining States, the total volumes of industrial sales and deliveries and of the combined residential/commercial sales and deliveries were determined. Companies with natural gas deliveries to the industrial sector or to the combined residential/commercial sector above a certain level were selected with certainty. Since a few large companies often account for most of the natural gas delivered within a State, this ensures those companies' inclusion in the sample. The formula for determining certainty was applied independently in the two consumer sectors—the industrial

and the combined residential/commercial. These selected companies, together with the companies in the jurisdictions discussed where sampling was not feasible, formed the certainty stratum.

All companies with natural gas deliveries in sector j greater than the cut-off value (C_j) were included in the certainty stratum. The formula for C_j was:

$$C_j = \frac{X_{.j}}{2n} \quad (1)$$

where:

C_j = cutoff value for consumer sector j ,

n = target sample size to be selected for the State, 25 percent of the companies in the State,

X_{ij} = the annual volume of natural gas deliveries by company i to customers in consumer sector j ,

$X_{.i}$ = the sum within State of annual gas volumes for company i ,

$X_{.j}$ = the sum within State of annual gas volumes in consumer sector j ,

$X_{..}$ = the sum within State of annual gas volumes in all consumer sectors.

Noncertainty Stratum. All other companies formed the noncertainty stratum. They were systematically sampled with probability proportional to size. The measure of size for each company was the total volume of gas sales to all consumer sectors ($X_{.i}$). The number of companies to be selected from the noncertainty stratum was calculated for each State, with a minimum of 2.

The formula for selecting the number of noncertainty stratum companies was:

$$m = n \frac{X_2}{X_{..}} \quad (2)$$

where:

m = the sample size for the noncertainty stratum within a State,

X_2 = the sum within State of the $X_{.i}$ for all companies in the noncertainty stratum.

Companies were listed in ascending order according to their measure of size and then a cumulative measure of size in the stratum was calculated for each company. The cumulative measure of size was the sum of the measures of size for that company and all preceding companies on the list. An interval of width I for selecting the companies systematically was calculated using.

A uniform random number R was selected between zero and $\left(I = \frac{X_2}{m} \right) I$. The first sampled company was

the first company on the list to have a cumulative measure of size greater than R . The second company selected was the first company on the list to have a cumulative measure of size greater than $R + I$. $R + I$ was increased again by I to determine the third company to be selected. This procedure was repeated until the entire sample was drawn.

Subgroups. In eight States, the noncertainty stratum was divided into subgroups to ensure that gas in each consumer sector could be estimated. The systematic sample with probability proportional to size design described above was applied independently in each subgroup. The methods for determining the subgroup sample size and calculating the subgroup interval for sample selection were the same as the methods described above for the noncertainty stratum, except that X_2 was the sum within State of the $X_{.i}$ for only those companies in the subgroup.

These subgroups were defined only for the purpose of sample selection. They are:

California: companies handling only industrial gas and all other companies.

Iowa: companies handling industrial gas and companies delivering only to residential or commercial customers.

Louisiana: companies handling only industrial gas and all other companies, with the latter being further subdivided according to size. The larger group is comprised of all companies with total deliveries of at least 200 million cubic feet while the smaller group consists of companies with less than that volume of delivered gas (three subgroups).

Oklahoma: Companies delivering less than 500 million cubic feet of gas and those delivering more than that volume.

Texas: companies handling only residential/commercial gas, companies handling only industrial gas, and all other companies (three subgroups).

Estimation Procedures

Estimates of Volumes. A ratio estimator is applied to the volumes reported in each State by the sampled companies to estimate the total gas sales and deliveries for the State. Ratio estimators are calculated for each consumer sector—residential, commercial, and industrial—in each State where companies are sampled. The following annual data are taken from the most recent 1995 submissions of Form EIA-176:

The formula for calculating the ratio estimator (E_{vj}) for the volume of gas in consumer sector j is:

$$E_{vj} = \frac{Y_{.j}}{Y'_{.j}} \quad (3)$$

where:

$Y_{.j}$ = the sum within State of annual gas volumes in consumer sector j for all companies,

$Y'_{.j}$ = the sum within State of annual gas volumes in consumer sector j for those companies in the sample.

The ratio estimator is applied as follows:

$$V_{.j} = y_{.j} \times E_{vj} \quad (4)$$

where:

$V_{.j}$ = the State estimate of monthly gas volumes in consumer sector j ,

$y_{.j}$ = the sum within State of reported monthly gas volumes in consumer sector j .

Computation of Natural Gas Prices. The natural gas volumes that are included in the computation of prices represent only those volumes associated with natural gas sales.

The price of natural gas for a State within a sector is calculated as follows:

$$P_j = \frac{R_j}{V_j}$$

where:

P_j = the average price for gas sales within the State in consumer sector j ,

R_j = the reported revenue from natural gas sales within the State in consumer sector j ,

V_j = the reported volume of natural gas sales within the State in consumer sector j .

All average prices are weighted by their corresponding sales volume estimates when national average prices are computed.

The monthly average prices of natural gas are based on sales data only. Volumes of gas delivered for the account of others to these consumer sectors are not included in the State or national average prices.

Table 25 shows the percent of the total State volume that represents volumes from natural gas sales to the commercial and industrial sectors. This table may be helpful in evaluating commercial and industrial price data. Virtually all natural gas deliveries to the residential sector represent onsystem sales volumes only.

See the section on consumer price calculations in this Appendix for further price information.

Estimation for Nonrespondents. A volume for each consumer category is imputed for companies that fail to respond. The imputation is based on the previous month's value reported by the non-responding company and the change from the previous month to the current month in volumes reported by other companies in the State. The imputed volumes are included in the State totals. To estimate prices for non-respondents, the unit price (dollars per thousand cubic feet) reported by the company in the previous month is used.

The formula for imputing volumes of gas sales for nonrespondents was:

$$F_t = F_{t-1} \times \frac{y_{.jt}}{y_{.jt-1}} \quad (5)$$

where:

F_t = imputed gas volume for current month t ,

F_{t-1} = gas volume for the company for the previous month,

y_{jt} = gas volume reported by companies in the State stratum for report month t,

$y_{j,t-1}$ = gas volume in the previous month for companies in the State stratum that reported in month t.

Final Revisions

Adjusting Monthly Data to Annual Data. After the annual data reported on the Form EIA-176 have been submitted, edited, and prepared for publication in the *Natural Gas Annual*, revisions are made to monthly data. The revisions are made to the volumes and prices of natural gas delivered to consumers that have appeared in the *Natural Gas Monthly* to match them to the annual values appearing in the *Natural Gas Annual*. The revised monthly estimates allocate the difference between the sum of monthly estimates and the annual reports according to the distribution of the estimated values across the months.

Before the final revisions are made, changes or additions to submitted data received after publication of the monthly estimate and not sufficiently large to require a revision to be published in the *Natural Gas Monthly*, are used to derive an updated estimate of monthly consumption and revenues for each State's residential, commercial, or industrial natural gas consumption.

For each State, two numbers are revised, the estimated consumption and the estimated price per thousand cubic feet.

The formula for revising the estimated consumption is:

$$V^*_{jm} = V_{jm} + \left[(V_{ja} - V'_{jm}) \left(\frac{V_{jm}}{V'_{jm}} \right) \right] \quad (6)$$

where:

V^*_{jm} = the final volume estimate for month m in consumer sector j,

V_{jm} = the estimated volume for month m in consumer sector j,

V_{ja} = the volume for the year reported on Form EIA-176,

V'_{jm} = The annual sum of estimated monthly volumes.

The price is calculated as described above in the Estimation Procedures section, using the final revised consumption estimate and a revised revenue estimate.

The formula for revising the estimated revenue is:

$$R^*_{jm} = R_{jm} + \left[(R_{ja} - R'_{jm}) \left(\frac{R_{jm}}{R'_{jm}} \right) \right] \quad (7)$$

where:

R^*_{jm} = the final revenue estimate for month m in consumer sector j,

R_{jm} = the estimated revenue for month m in consumer sector j,

R_{ja} = the revenue for the year reported on Form EIA-176,

R'_{jm} = The annual sum of estimated monthly revenues. Revision of Volumes and Prices for Deliveries to Electric Utilities. Revisions to monthly electric utilities data are published throughout the year as they become available.

Reliability of Monthly Data

The monthly data published in this report are subject to two sources of error - nonsampling error and sampling error. Nonsampling errors occur in the collection and processing of the data. See the discussion of the Form EIA-857 in Appendix B for a description of nonsampling errors for monthly data.

Sampling error may be defined as the difference between the results obtained from a sample and the results that a complete enumeration would provide. The standard error statistic is a measurement of sampling error.

Standard Errors. A standard error of an estimate is a statistical measure that indicates how the estimate from the sample compares to the result from a complete enumeration. Standard errors are calculated based on statistical theory that refers to all possible samples of the same size and design.

The standard errors for monthly natural gas volume estimates by State are given in Table C1. Ninety-five percent of the time, the volume that would have been obtained from a complete enumeration will lie in the range between the estimated volume minus two

standard errors and the estimated volume plus two standard errors.

The standard error of the natural gas volume estimate is the square root of the variance of the estimate. The formula for calculating the variance of the volume estimate is:

$$V(\hat{Y}) = \sum_{h=1}^H \left[N_h^2 \frac{(1 - \frac{n_h}{N_h})}{n_h(n_h - 1)} \left(\sum_{i=1}^{n_h} (y_i - Tx_i)^2 \right) \right] \quad (8)$$

where:

H = the total number of strata

N_h = the total number of companies in stratum h

n_h = the sample size in stratum h

y_i = the reported monthly volume for company i

x_i = the reported annual volume for company i

T = the ratio of the sum of the reported monthly volumes for sample companies to the sum of the reported annual volumes for the sample companies.

Table C-1. Standard Error for Natural Gas Deliveries and Price to Consumers by State, November 1999

State	Volume Million Cubic Feet				Price Dollars per Thousand Cubic Feet		
	Residential	Commercial	Industrial	Total	Residential	Commercial	Industrial
Alabama	106	353	4,346	4,362	0.44	1.00	0.57
Alaska	0	0	0	0	—	—	—
Arizona	79	23	0	82	0.10	0.02	—
Arkansas	NA	NA	52	NA	NA	NA	0.25
California	60	111	1,075	1,083	0.04	0.05	0.16
Colorado	NA	NA	NA	NA	NA	NA	NA
Connecticut	0	0	0	0	—	—	—
Delaware	0	0	0	0	—	—	—
District of Columbia	0	0	0	0	—	—	—
Florida	30	684	1,305	1,473	0.62	0.44	0.28
Georgia	NA	NA	NA	NA	NA	NA	NA
Hawaii	0	0	0	0	—	—	—
Idaho	0	0	0	0	—	—	—
Illinois	774	1,229	2,395	2,801	0.16	0.80	0.08
Indiana	NA	NA	NA	NA	NA	NA	NA
Iowa	52	33	17	64	0.04	0.03	0.26
Kansas	3,231	3,022	5,325	6,923	2.07	1.73	2.09
Kentucky	596	622	603	1,051	0.20	0.33	0.80
Louisiana	18	27	4,352	4,353	0.04	0.06	0.02
Maine	0	0	0	0	—	—	—
Maryland	13	21	12	28	—	0.01	0.02
Massachusetts	NA	NA	NA	NA	NA	NA	NA
Michigan	151	151	1,971	1,982	0.04	0.04	0.12
Minnesota	NA	378	550	NA	NA	0.25	0.28
Mississippi	142	45	734	749	0.51	0.05	1.13
Missouri	354	366	176	539	0.11	0.21	3.06
Montana	12	5	0	13	0.01	0.03	—
Nebraska	30	33	83	94	0.05	0.05	0.09
Nevada	0	0	0	0	—	—	—
New Hampshire	0	0	0	0	—	—	—
New Jersey	NA	NA	NA	NA	NA	NA	NA
New Mexico	90	108	7,847	7,849	0.24	0.09	0.83
New York	NA	NA	1,347	NA	NA	NA	0.37
North Carolina	51	40	468	473	0.04	0.01	0.13
North Dakota	0	NA	0	NA	—	NA	—
Ohio	789	6,116	6,394	8,883	0.49	0.04	0.29
Oklahoma	412	113	841	943	0.47	0.18	1.53
Oregon	0	0	0	0	—	—	—
Pennsylvania	27	37	1,245	1,246	0.01	0.02	0.20
Rhode Island	0	0	0	0	—	—	—
South Carolina	41	54	930	933	0.14	0.11	0.03
South Dakota	0	0	0	0	—	—	—
Tennessee	170	328	2,122	2,153	0.22	0.24	0.55
Texas	45	3,407	0	3,407	—	0.78	—
Utah	0	0	0	0	—	—	—
Vermont	0	0	0	0	—	—	—
Virginia	684	178	590	921	0.50	0.25	5.32
Washington	NA	NA	NA	NA	NA	NA	NA
West Virginia	NA	916	NA	NA	NA	0.98	NA
Wisconsin	594	396	248	755	0.24	0.46	0.42
Wyoming	32	NA	NA	NA	0.28	NA	NA
Total	4,619	8,325	14,248	17,136	0.09	0.11	0.14

NA Not Available.
— Not Applicable.

Source: Energy Information Administration, Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers."

Appendix D

Articles, Special Focuses and Special Reports

A variety of energy-related subjects are frequently included in this publication. The following articles have appeared in previous issues.

Feature Articles

<i>Natural Gas 1998: Issues and Trends - Executive Summary</i>	April 1999
<i>EIA Corrects Errors in EIA's Drilling Activity Estimates Series</i>	March 1998
<i>Recent Trends in Natural Gas Spot Prices</i>	December 1997
<i>Natural Gas Residential Pricing Developments During the 1996-97 Winter</i>	August 1997
<i>Revisions to Monthly Natural Gas Data</i>	July 1997
<i>Intricate Puzzle of Oil and Gas "Reserves Growth"</i>	July 1997
<i>Restructuring Energy Industries: Lessons from Natural Gas</i>	May 1997

Special Focuses

<i>Corporate Realignments and Investments in the Interstate Natural Gas Transmission System</i>	October 1999
<i>Deliverability on the Interstate Natural Gas Pipeline System</i>	May 1998
<i>Advance Summary: U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves, 1996 Annual Report - Advance Summary</i>	September 1997
<i>Worldwide Natural Gas Supply and Demand and the Outlook for Global LNG Trade</i>	August 1997
<i>Outlook for Natural Gas Through 2015</i>	January 1997
<i>Natural Gas Productive Capacity</i>	January 1997

Special Reports

<i>Natural Gas Winter Outlook 1999-2000</i>	October 1999
<i>U.S. Natural Gas Imports and Exports - 1998</i>	August 1999

<i>Retail Unbundling</i>	July 1999
<i>Natural Gas 1998: A Preliminary Summary</i>	April 1999
<i>U.S. Natural Gas Imports and Exports - 1997</i>	August 1999
<i>Revisions to Monthly Natural Gas Data</i>	July 1998
<i>Natural Gas 1997: A Preliminary Summary</i>	April 1998
<i>Comparison of Natural Gas Storage Estimates from the EIA and AGA</i>	October 1997
<i>U.S. Underground Storage of Natural Gas in 1997: Existing and Proposed</i>	September 1997
<i>U.S. Natural Gas Imports and Exports - 1996</i>	August 1997
<i>Natural Gas 1996: Highlights</i>	April 1997
<i>Natural Gas Pipeline and System Expansions</i>	April 1997
<i>Natural Gas Analysis and Geographic Information Systems</i>	March 1997

Appendix E

Technical Contacts

Section	Tables		Principal Data Sources	Technical Contact
Summary Statistics: Natural Gas Production	1,2,3	Monthly: Annual:	EIA-895, "Monthly Quantity of Natural Gas Report"	Sharon Belcher (202)586-6119
		Monthly:	Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers"	Roy Kass (202)586-4790
Extraction Loss	1	Monthly: Annual:	EIA computations Form EIA-816, "Monthly Natural Gas Liquids Report" and Form EIA-64A, "Annual Report of the Origin of Natural Gas Liquids Production"	Margo Natof (202)586-6303
Supplemental Gaseous Fuels	2	Monthly: Annual:	EIA computations Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition"	Margo Natof (202)586-6303
Imports and Exports	2	Monthly: Annual:	EIA computations Office of Fossil Energy, U.S. Department of Energy, "Natural Gas Import and Exports"	Ann Ducca (202)586-6137
Price: City Gate, Residential, Commercial, and Industrial	4	Monthly:	Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers"	Roy Kass (202)586-4790
Wellhead	4	Monthly: Annual:	EIA computations Form EIA-895, "Monthly Quantity and Value of Natural Gas Report"	Sylvia Norris (202)586-6106
Electric Utility	4	Monthly:	Form FPC-423, "Cost and Quality of Fuels for Electric Power Plants"	Roy Kass (202)586-4790
Summary of Natural Gas Imports and Exports	5,6	Monthly:	Quarterly Natural Gas Import and Export Sales and Price Report	Ann Ducca (202)586-6137
Producer Related Activities: Natural Gas Production	7,8	Monthly:	EIA-895, "Monthly Quantity of Natural Gas Report"	Sharon Belcher (202)586-6119
Underground Storage:	9,10,11, 12,13,14	Monthly:	Forms FERC-8 and EIA-191, "Underground Gas Storage Report"	Carol Jones (202) 586-6168
Distribution and Consumption: Deliveries to: Residential, Commercial, Industrial, Electric Utility, All Consumers	15 16 17 18 19	Monthly:	Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers" Form FERC-423, "Cost and Quality of Fuels for Electric Power Plants"	Roy Kass (202)586-4790
Average Price to: City Gate, Residential, Commercial, Industrial, Electric Utility Onsystem Sales	20 21 22 23 24 25	Monthly:	Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers" Form FERC-423, "Cost and Quality of Fuels for Electric Power Plants"	Roy Kass (202)586-4790
Heating Degree Days	26	Seasonal:	National Oceanic and Atmospheric Administration	Roy Kass (202)586-4790
Highlights				Patricia Wells (202)586-6077
				Mary Carlson (202)586-4749

Glossary

Balancing Item: Represents the difference between the sum of the components of natural gas supply and the sum of the components of natural gas disposition. These differences may be due to quantities lost or to the effects of data reporting problems. Reporting problems include differences due to the net result of conversions of flow data metered at varying temperature and pressure bases and converted to a standard temperature and pressure base; the effect of variations in company accounting and billing practices; differences between billing cycle and calendar period time frames; and imbalances resulting from the merger of data reporting systems which vary in scope, format, definitions, and type of respondents.

Base (Cushion) Gas: The volume of gas needed as a permanent inventory to maintain adequate underground storage reservoir pressures and deliverability rates throughout the withdrawal season. All native gas is included in the base gas volume.

British Thermal Unit (Btu): The heat required to raise the temperature of one pound of water by one degree Fahrenheit at or near 39.2 degrees Fahrenheit.

City-gate: A point or measuring station at which a gas distribution company receives gas from a pipeline company or transmission system.

Commercial Consumption: Gas used by nonmanufacturing organizations such as hotels, restaurants, retail stores, laundries, and other service enterprises, and gas used by local, State, and Federal agencies engaged in nonmanufacturing activities.

Depletion: The loss in service value incurred in connection with the exhaustion of the natural gas reserves in the course of service.

Depreciation: The loss in service value not restored by current maintenance, incurred in connection with the consumption or respective retirement of a gas plant in the course of service from causes that are known to be in current operation and against which the utility is not protected by insurance; for example, wear and tear, decay, obsolescence, changes in demand and requirements of public authorities, and the exhaustion of natural resources.

Dry Natural Gas Production: Marketed production less extraction loss.

Electric Utility Consumption: Gas used as fuel in electric utility plants.

Exports: Natural gas deliveries out of the continental United States and Alaska to foreign countries.

Extraction Loss: The reduction in volume of natural gas resulting from the removal of natural gas liquid constituents at natural gas processing plants.

Flared: The volume of gas burned in flares on the base site or at gas processing plants.

Gross Withdrawals: Full well stream volume, including all natural gas plant liquid and nonhydrocarbon gases, but excluding lease condensate. Also includes amounts delivered as royalty payments or consumed in field operations.

Imports: Natural gas received in the Continental United States (including Alaska) from a foreign country.

Independent: Producers: Any person who is engaged in the production or gathering of natural gas and who sells natural gas in interstate commerce for resale but who is not engaged in the transportation of natural gas (other than gathering) by pipeline in interstate commerce.

Industrial Consumption: Natural gas used by manufacturing and mining establishments for heat, power, and chemical feedstock.

Interstate Companies: Natural gas pipeline companies subject to FERC jurisdiction.

Intransit Deliveries: Redeliveries to a foreign country of foreign gas received for transportation across U.S. territory and deliveries of U.S. gas to a foreign country for transportation across its territory and redelivery to the United States.

Intransit Receipts: Receipts of foreign gas for transportation across U.S. territory and redelivery to a

foreign country and redeliveries to the United States of U.S. gas transported across foreign territory.

Intrastate Companies: Companies not subject to FERC jurisdiction.

Lease and Plant Fuel: Natural gas used in well, field, lease operations and as fuel in natural gas processing plants.

Liquefied Natural Gas (LNG): Natural gas that has been liquefied by reducing its temperature to minus 260 degrees Fahrenheit at atmospheric pressure.

Marketed Production: Gross withdrawals less gas used for repressuring, quantities vented and flared, and nonhydrocarbon gases removed in treating or processing operations. Includes all quantities of gas used in field and processing operations. See Explanatory Note 1 for discussion of coverage of data concerning nonhydrocarbon gases removed.

Native Gas: Gas in place at the time that a reservoir was converted to use as an underground storage reservoir as in contrast to injected gas volumes.

Natural Gas: A mixture of hydrocarbon compounds and small quantities of various nonhydrocarbons existing in the gaseous phase or solution with oil in natural underground reservoirs at reservoir conditions.

Nonhydrocarbon Gases: Typical nonhydrocarbon gases that may be present in reservoir natural gas are carbon dioxide, helium, hydrogen sulfide, and nitrogen.

Onsystem Sales: Sales to customers where the delivery point is a point on, or directly interconnected with, a transportation, storage, and/or distribution system operated by the reporting company.

Pipeline Fuel: Gas consumed in the operation of pipelines, primarily in compressors.

Repressuring: The injection of gas into oil or gas formations to effect greater ultimate recovery.

Residential Consumption: Gas used in private dwellings, including apartments, for heating, cooking, water heating, and other household uses.

Salt Cavern Storage Field: A storage facility that is a cavern hollowed out in either a salt "bed" or "dome" formation.

Storage Additions: The volume of gas injected or otherwise added to underground natural gas or liquefied natural gas storage during the applicable reporting period.

Storage Withdrawals: Total volume of gas withdrawn from underground storage or liquefied natural gas storage during the applicable reporting period.

Supplemental Gaseous Fuels Supplies: Synthetic natural gas, propane-air, refinery gas, biomass gas, air injected for stabilization of heating content, and manufactured gas commingled and distributed with natural gas.

Synthetic Natural Gas (SNG): A manufactured product chemically similar in most respects to natural gas, that results from the conversion or reforming of petroleum hydrocarbons and may easily be substituted for or interchanged with pipeline quality natural gas.

Therm: One-hundred thousand British thermal units.

Underground Gas Storage Reservoir Capacity: Interstate company reservoir capacities are those certificated by FERC. Independent producer and intrastate company reservoir capacities are reported as developed capacity.

Vented Gas: Gas released into the air on the base site or at processing plants.

Wellhead Price: Represents the wellhead sales price, including charges for natural gas plant liquids subsequently removed from the gas, gathering and compression charges, and State production, severance, and/or similar charges.

Working (Top Storage) Gas: The volume of gas in an underground storage reservoir above the designed level of the base. It may or may not be completely withdrawn during any particular withdrawal season. Conditions permitting, the total working capacity could be used more than once during any season.